Iowa Department of Natural Resources
Final Title V Operating Permit

Name of Permitted Facility: United States Gypsum Company
Facility Location: 2110 Paragon Avenue
Fort Dodge, IA 50501

Air Quality Operating Permit Number: 03-TV-019
Expiration Date: June 23, 2008

EIQ Number: 92-5175
Facility File Number: 94-01-017

Responsible Official
Terry Davis
Plant Manager
2110 Paragon Avenue
Fort Dodge, IA 50501
(515) 576-4151

Permit Contact Person for the Facility
Clay Shumway
Engineering Manager
2110 Paragon Avenue
Fort Dodge, IA 50501
(515) 576-4151

This permit is issued in accordance with 567 Iowa Administrative Code Chapter 22, and is issued subject to the terms and conditions contained in this permit.

For the Director of the Department of Natural Resources

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Douglas A. Campbell, Supervisor of Air Operating Permits Section Date

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Abbreviations

acfm ..... actual cubic feet per minute
scfm ..... standard cubic feet per minute
CFR ..... Code of Federal Regulation
^{o}F ..... degrees Fahrenheit
EIQ ..... emissions inventory questionnaire
gr/dscf ..... grains per dry standard cubic foot
grams/dscm ..... grams per dry standard cubic meter
IAC ..... Iowa Administrative Code
IDNR ..... Iowa Department of Natural Resources
MVAC ..... motor vehicle air conditioner
NSPS ..... new source performance standard
ppmv ..... parts per million by volume
lb/hr ..... pounds per hour
lb/MMBtu ..... pounds per million British thermal units
TPY ..... Tons per year
USEPA ..... United States Environmental Protection Agency
VMT/hr ..... vehicle miles traveled per hour
SIC ..... standard industrial classification
SCC ..... source classification code
HRA ..... Heat Resistant Agent
PST ..... Pre-Stucco Treatment

Pollutants

PM ..... particulate matter
PM_{10} ..... particulate matter ten microns or less in aerodynamic diameter
SO_2 ..... sulfur dioxide
NO_x ..... nitrogen oxides
VOC ..... volatile organic compound
CO ..... carbon monoxide
HAP ..... hazardous air pollutant

I. Facility Description and Equipment List

Facility Name: United States Gypsum Company
Permit Number: 03-TV-019

Facility Description: Gypsum Products Manufacturing (SIC 3275)

Equipment List

Emission Point Number	Associated Emission Unit Number(s)	Associated Emission Unit Description
EP 1	EU 1	Quarry Haul Road
EP 2	EU 2	Rock Unloading
EP 3	EU 3	Primary Crusher
EP 3A	EU 3A	Belt Conveyor
EP 4	EU 4 EU 5	Secondary Crusher Belt Conveyor
EP 6	EU 6	Rock Shed
EP 7	EU 7	Rock Silo Screen
EP 9	EU 8 EU 9	#1 Raymond Mill #1 Raymond Mill (Combustion)
EP 11	EU 10 EU 11	#2 Raymond Mill #2 Raymond Mill (Combustion)
EP 13	EU 12 EU 13	#3 Raymond Mill #3 Raymond Mill (Combustion)
EP 14	EU 14	Stucco Distribution
EP 15	EU 15	#1 Stucco Kettle
EP 16	EU 16	#1 Stucco Kettle (Combustion)
EP 17	EU 17	#2 Stucco Kettle
EP 18	EU 18	#2 Stucco Kettle (Combustion)
EP 19	EU 19	#3 Stucco Kettle
EP 20	EU 20	#3 Stucco Kettle (Combustion)
EP 21	EU 21	#4 Stucco Kettle
EP 22	EU 22	#4 Stucco Kettle (Combustion)
EP 23	EU 23	#5 Stucco Kettle
EP 24	EU 24	#5 Stucco Kettle (Combustion)
EP 25	EU 25	Kettle Hot Pit
EP 26	EU 26	Kettle Feed Storage Bin for #1, #2, #3
EP 27	EU 27	Mill Tube Mill
EP 28	EU 28	#6 Kettle Feed Bin
EP 30	EU 30	Hydrocal Bulk Boiler

Equipment List (cont'd)

Emission Point Number	Associated Emission Unit Number(s)	Associated Emission Unit Description
EP 32	EU 31 EU 32	Hydrocal Bulk Impact Mill Hydrocal Bulk Impact Mill (Combustion)
EP 33	EU 33	Hydrocal Rock Bin
EP 34	EU 34	Hydrocal Bulk Finish Grind
EP 36	EU 36	Hydrocal Bulk Tube Mill (Combustion)
EP 41	EU 41	Hydrocal Finish 1A & 1B Base Storage Bin
EP 42	EU 42	Hydrocal Finish 2A & 2B Base Storage Bin
EP 43	EU 43	Hydrocal Finish #1 Base Supply Bin
EP 44	EU 44	Hydrocal Finish #2 Base Supply Bin
EP 45	EU 45	Hydrocal Finish #3A Carbonate Supply Bin
EP 46	EU 46	Hydrocal Finish #3B Cement Supply Bin
EP 47	EU 47	Hydrocal Finish North Carbonate Supply Bin
EP 48	EU 48	Hydrocal Finish South Cement Supply Bin
EP 49	EU 49	Hydrocal Finish Bulk Loading Drag Conveyor #1
EP 50	EU 50	Hydrocal Finish Packers & Conveyors
EP 52	EU 52	Hydrocal Finish Type 1 Cement Storage
EP 55	EU 55	Cement Bin
EP 56	EU 56	Hydrocal Finish Packers & Conveyors #2
EP 58	EU 58	Hydrocal C Base Grinding and Conveying Equipment
EP 59	EU 59 EU 60	Hydrocal C Base Dryer Mill Hydrocal C Base Dryer Mill (Combustion)
EP 61	EU 61	Hydrocal C Base Tube Mill Feed Bin
EP 62	EU 62	Hydrocal C Base Packing Supply Bin
EP 63	EU 63	Hydrocal C Base Landplaster Bin
EP 64	EU 64	Hydrocal Bulk Loading
EP 65	EU 65	Hydrocal Bulk Loading Drag Conveyor #2 (North)
EP 66	EU 66	Hydrocal C Base Boiler
EP 67	EU 67	Hydrocal C Base Tube Mill Burner
EP 71	EU 71	#1 Board End Saw
EP 73	EU 73	East Stucco Silo
EP 74	EU 74	West Stucco Silo
EP 76	EU 76	#1 Board Drying Kiln
EP 78	EU 78	#1 Board PST & Mixer
EP 80	EU 80	Board Cut Back Saw
EP 82	EU 82	#1 Board HRA Ball Mill
EP 83	EU 83	#1 Board HRA Landplaster Storage Bin
EP 91	EU 91	Ready Mix Carbonate Supply Bin
EP 92	EU 92	Ready Mix Mixer Feed Bin

Equipment List (cont'd.)

Emission Point Number	Associated Emission Unit Number(s)	Associated Emission Unit Description
EP 93	EU 93	Ready Mix Bag Dump Station
EP 100	EU 100	Stockpile - North
EP 101	EU 101	Stockpile - South
EP 118	EU 118	Mill Loadout
EP 122B	EU 122B	Bagging Fugitives
EP 125B	EU 125B	Board Mixing Fugitives
EP 125C	EU 125C	#1 Board PST Fugitives
EP 128	EU 128	Stucco Transfer
EP 132	EU 132	Stockpile - West
EP 140	EU 140	Rock Loading Traffic
EP 141	EU 141	Umthun Haul Road
EP 150	EU 150	Soap
EP 151	EU 151	Ink Usage
EP 152	EU 152	Latex
EP 160	EU 160	Emergency Generator
EP 181	EU 181	Conveyor – Stucco
Rock Crushing Operation		
EP 302	EU 302	Primary Crusher-Quarry
EP 303	EU 303	Belt Conveyor-Quarry
EP 305	EU 305	Belt Conveyor- Quarry
EP 307	EU 307	Truck Loading-Quarry
EP 311	EU 311	Belt Conveyor-Plant
EP 304	EU 304	Stockpile-Quarry
EP 308	EU 308	Haul Road-Quarry
EP 401	EU 401	Hydrocal Finish Bulk A-Base Supply Bin
EP 402	EU 402	Hydrocal Finish Bulk C-Base Supply Bin
EP 403	EU 403	Hydrocal Finish Bulk Type 1 Cement Supply Bin
EP 405	EU 405	Hydrocal Finish Bulk Floor Fill Stucco Supply Bin
EP 406	EU 406	Hydrocal Finish Stucco Supply Bin
EP 407	EU 407	Hydrocal Finish Bulk Packaging System
EP 409	EU 409	Hydrocal Finish Bulk C-Base Packaging Supply Bin
EP 411	EU 411	Waste Bin
EP 412	EU 412	Hydrocal Finish Type 1 Cement System

Insignificant Equipment List

Insignificant Emission Unit Number	Insignificant Emission Unit Description
EU 102	500-gal Diesel Storage Tanks (2)
EU 103	1,000-gal Underground Gasoline Storage Tanks (2)
EU 104	75,000-gal #2 Fuel Oil Storage Tank
EU 105	75,000-gal #2 Fuel Oil Storage Tank
EU 106	17,000-gal Diesel Storage Tank
EU 107	100-gal Waste Oil Storage Tank
EU 108	1,000-gal Waste Oil Storage Tank
EU 110	1,000-gal Propane Tank
EU 111	Natural Gas Pipeline
EU 114	Waste Truck Loadout
EU 116	#1 Board Baghouse Loadout
EU 119	Hydrocal Baghouse Loadout
EU 120A	Mill Material Transfer Fugitives
EU 121A	Hydrocal Bulk Rock Dump
EU 121B	Hydrocal Bulk Bag Dump
EU 121D	Rock Conveyance
EU 121E	Hydrocal Material Transfer Fugitives
EU 122C	Material Transfer
EU 123A	Storage Bin 12B
EU 123B	Storage Bin 12C
EU 123C	Storage Bin 22
EU 124A	Material Transfer/Bag Dump
EU 124B	Ready Mix Material Transfer Fugitives
EU 125A	Ball Mill Feed Fugitives
EU 125E	Radial Arm Saw
EU 125G	Shearing
EU 125H	HRA Landplaster Storage Bin
EU 125I	MCM Bag Dump
EU 130	Oversized Rock Pile North
EU 131	Oversized Rock Pile South
EU 133	Haul Road Stock Pile
EU 134	A-Base & C-Base Bunker
EU 135	Mill Fines Bunkers
EU 136	Mill Cleanouts
EU 137	Floor Sweepings Bunker
EU 138	End Cut Bunker
EU 139	Wallboard Waste Pile
EU 153	Fungicide
EU 154	Preservative

Insignificant Equipment List (cont'd.)

Insignificant Emission Unit Number	Insignificant Emission Unit Description
EU 155	Miscellaneous Paint Usage
EU 157A	Parts Washer 340
EU 157B	Parts Washer 440
EU 157C	Parts Washer 23
EU 157D	Parts Washer 110
EU 157E	Parts Washer 300
EU 157F	Parts Washer 300
EU 161	Heated Power Washer
EU 162A	Maintenance Shop Heaters
EU 162B	Hydrocal Finish Heaters
EU 162C	Mill Heaters
EU 162D	Board Plant Heaters Grp.1
EU 162E	Board Plant Heaters Grp.2
EU 162F	Board Plant Heaters Grp.3
EU 162G	Board Plant Heaters Grp.4
EU 162H	Board Plant Heaters Grp.5
EU 162I	Board Plant Heaters Grp.6
EU 162J	Miscellaneous Heaters
EU 162K	Ready Mix Heaters Grp.1
EU 162L	Ready Mix Heaters Grp.2
EU 162M	Ready Mix Heaters Grp.3
EU 163	Paper Heaters
EU 170	Shielded Metal Arc Welding (Maintenance)
EU 171	Shielded Metal Arc Welding (Maintenance)
EU 174	Plasma Cutting Torches
EU 175	Maintenance Grinding
EU 180	Conveyor – Rock
EU 300	Storage Pile-Quarry
EU 301	Rock Unload-Quarry
EU 310	Truck Unload-Plant
EU 413	Hydrocal Finish Hammer Mill

II. Plant-Wide Conditions

Facility Name: United States Gypsum Company
Permit Number: 03-TV-019

Permit conditions are established in accord with 567 Iowa Administrative Code rule 22.108

Permit Duration

The term of this permit is: Five (5) years
Commencing on: June 24, 2003
Ending on: June 23, 2008

Amendments, modifications and reopenings of the permit shall be obtained in accordance with 567 Iowa Administrative Code rules 22.110 - 22.114. Permits may be suspended, terminated, or revoked as specified in 567 Iowa Administrative Code Rules 22.115.

Emission Limits
Unless specified otherwise in the Source Specific Conditions, the following limitations and supporting regulations apply to all emission points at this plant:

Opacity (visible emissions): 40% opacity
Authority for Requirement: 567 IAC 23.3(2)"d"

SO_2: 500 parts per million by volume
Authority for Requirement: 567 IAC 23.3(3)"e"

Particulate Matter (state enforceable only)[1]:
No person shall cause or allow the emission of particulate matter from any source in excess of the emission standards specified in this chapter, except as provided in 567 – Chapter 24. For sources constructed, modified or reconstructed after July 21, 1999, the emission of particulate matter from any process shall not exceed an emission standard of 0.1 grain per dry standard cubic foot of exhaust gas, except as provided in 567 – 21.2(455B), 23.1(455B), 23.4(455B) and 567 – Chapter 24.

For sources constructed, modified or reconstructed prior to July 21, 1999, the emission of particulate matter from any process shall not exceed the amount determined from Table I, or amount specified in a permit if based on an emission standard of 0.1 grain per standard cubic foot of exhaust gas or established from standards provided in 23.1(455B) and 23.4(455B).
Authority for Requirement: 567 IAC 23.3(2)"a" (as revised 7/21/1999)

[1] This is the current language in the Iowa Administrative Code (IAC). This version of the rule is awaiting EPA approval to become part of Iowa's State Implementation Plan (SIP). When EPA approves this rule, it will replace the older version and will be considered federally enforceable.

Particulate Matter (federally enforceable)[2]:
The emission of particulate matter from any process shall not exceed the amount determined from Table I, except as provided in 567 — 21.2(455B), 23.1(455B), 23.4(455B) and 567 — Chapter 24. If the director determines that a process complying with the emission rates specified in Table I is causing or will cause air pollution in a specific area of the state, an emission standard of 0.1 grain per standard cubic foot of exhaust gas may be imposed.
Authority for Requirement: 567 IAC 23.3(2)"a" (prior to 7/21/1999)

Fugitive Dust: Attainment and Unclassified Areas - No person shall allow, cause or permit any materials to be handled, transported or stored; or a building, its appurtenances or a construction haul road to be used, constructed, altered repaired or demolished, with the exception of farming operations or dust generated by ordinary travel on unpaved public roads, without taking reasonable precautions to prevent particulate matter in quantities sufficient to create a nuisance, as defined in Iowa Code section 657.1, from becoming airborne. All persons, with the above exceptions, shall take reasonable precautions to prevent the discharge of visible emissions of fugitive dusts beyond the lot line of the property on which the emissions originate. The highway authority shall be responsible for taking corrective action in those cases where said authority has received complaints of or has actual knowledge of dust conditions which require abatement pursuant to this subrule. Reasonable precautions may include, but not limited to, the following procedures.

1. Use, where practical, of water or chemicals for control of dusts in the demolition of existing buildings or structures, construction operations, the grading of roads or the clearing of land.
2. Application of suitable materials, such as but not limited to asphalt, oil, water or chemicals on unpaved roads, material stockpiles, race tracks and other surfaces which can give rise to airborne dusts.
3. Installation and use of containment or control equipment, to enclose or otherwise limit the emissions resulting from the handling and transfer of dusty materials, such as but not limited to grain, fertilizers or limestone.
4. Covering at all times when in motion, open-bodied vehicles transporting materials likely to give rise to airborne dusts.
5. Prompt removal of earth or other material from paved streets or to which earth or other material has been transported by trucking or earth-moving equipment, erosion by water or other means.

Authority for Requirement: 567 IAC 23.3(2)"c"

Compliance Plan
The owner/operator shall comply with the applicable requirements listed below. The compliance status is based on information provided by the applicant.

Unless otherwise noted in Section III of this permit, United States Gypsum Company is in compliance with all applicable requirements and shall continue to comply with all such requirements. For those applicable requirements which become effective during the permit term, United States Gypsum Company shall comply with such requirements in a timely manner.
Authority for Requirement: 567 IAC 22.108(15)

[2] This is the current language in the Iowa SIP, and is enforceable by EPA.

III. Emission Point-Specific Conditions

Facility Name: United States Gypsum Company
Permit Number: **03-TV-019**

Emission Point ID Number: EP 1

Associated Equipment

Associated Emission Unit ID Number: EU 1
Emissions Control Equipment ID Number: CE 1
Emissions Control Equipment Description: Dust Suppression by Water/Chemical Agents

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Applicable Requirements

Emission Unit vented through this Emission Point: EU 1
Emission Unit Description: Quarry Haul Road
Raw Material/Fuel: Gravel Road
Rated Capacity: 8.525 VMT/hr

Emission Limits (lb/hr, gr/dscf, lb/MMBtu, % opacity, etc.)
The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Fugitive Dust
Emission Limit: No person shall allow, cause or permit any materials to be handled, transported or stored; or a building, its appurtenances or a construction haul road to be used, constructed, altered, repaired or demolished, without taking reasonable precautions to prevent a nuisance. All persons shall take reasonable precautions to prevent the discharge of visible emissions of fugitive dusts beyond the lot line of the property on which the emissions originate.

Authority for Requirement: 567 IAC 23.3(2)"c"

Operational Limits & Requirements
The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Reporting & Record keeping:
A. The owner/operator shall record the date and time when water and/or chemicals are used to control emissions from this emission unit. Records shall be maintained on-site for five (5) years and be available for inspection by representatives of the IDNR.

Authority for Requirement: 567 IAC 22.108(3)

Periodic Monitoring Requirements

The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)"b"

Emission Point ID Number: EP 2

Associated Equipment

Associated Emission Unit ID Number(s): EU 2

Applicable Requirements

Emission Unit vented through this Emission Point: EU 2
Emission Unit Description: Rock Unloading
Raw Material/Fuel: Rock
Rated Capacity: 400 tons/hr

Emission Limits (lb/hr, gr/dscf, lb/MMBtu, % opacity, etc.)
The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Fugitive Dust
Emission Limit: No person shall allow, cause or permit any materials to be handled, transported or stored; or a building, its appurtenances or a construction haul road to be used, constructed, altered, repaired or demolished, without taking reasonable precautions to prevent a nuisance. All persons shall take reasonable precautions to prevent the discharge of visible emissions of fugitive dusts beyond the lot line of the property on which the emissions originate.

Authority for Requirement: 567 IAC 23.3(2)"c"

Periodic Monitoring Requirements
The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)"b"

Emission Point ID Numbers: EP 3, EP 3A

Associated Equipment

Associated Emission Unit ID Numbers: EU 3, EU 3A

Applicable Requirements

Emission Unit vented through this Emission Point: EU 3
Emission Unit Description: Primary Crusher
Raw Material/Fuel: Rock
Rated Capacity: 294 tons/hr

Emission Unit vented through this Emission Point: EU 3A
Emission Unit Description: Belt Conveyor
Raw Material/Fuel: Rock
Rated Capacity: 294 tons/hr

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)
The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity/Particulate Matter
Emission Limit(s): Per 567 IAC 23.1(2)"bbb" [New Source Performance Standards (NSPS) Subpart OOO (Standards of Performance for Nonmetallic Mineral Processing Plants)] on and after the sixtieth day after achieving the maximum production rate at which the affected facilities (Primary Crusher EU 3 & Belt Conveyor EU 3A) listed in this permit (03-A-334) will be operated, but no later than one hundred eighty (180) days after the initial startup, no owner or operator shall cause to be discharged into the atmosphere from:

(a) Any of the affected facilities listed in this permit (03-A-334) which are not enclosed in a building any fugitive emissions which exhibit greater than 10 percent opacity, except for (b).
(b) Any crushers listed in this permit (03-A-334), at which a capture system is not used and is not enclosed in a building any fugitive emissions which exhibit greater than 15 percent opacity.
(c) Any building enclosing the affected facilities listed in this permit (03-A-334) any visible fugitive emissions except emissions from a vent as defined in § 60.671 of 40 CFR.
(d) Any vent of any building enclosing the affected facilities listed in this permit (03-A-334) emissions which exceed:
    - Particulate matter in excess of 0.05 grams/dscm (0.022 grains/dscf).
    - Opacity greater than 7 %.

Authority for Requirement: Iowa DNR Construction Permit 03-A-334
567 IAC 23.1(2)"bbb", 40 CFR 60.672(a)(1), (b), (c), (e)(1), (e)(2)

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Process throughput:

1. The process rate (quantity of nonmetallic minerals processed, in tons/hr) of this system shall not exceed an average of 294 tons per hour calculated on a daily basis.

Reporting & Record keeping:

The following records shall be maintained on-site for five (5) years and available for inspection upon request by representatives of the Department of Natural Resources:

1. The facility shall record the amount of nonmetallic minerals processed, in tons, for this system on a daily basis.
2. The facility shall record the hours of operation for this system on a daily basis.
3. The facility shall calculate and record on a daily basis the average hourly production rate (tons/hr) for this system based on the daily amount of nonmetallic minerals processed and daily hours of operation.

Authority for Requirement: Iowa DNR Construction Permit 03-A-334

Periodic Monitoring Requirements

The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.

Stack Testing:

Pollutant - Opacity

Stack Test to be Completed by - within sixty (60) days after achieving maximum production rate and no later than one hundred eighty (180) days after the initial startup date

Test Method - 40 CFR 60, Appendix A, Method 9[(1)]

Authority for Requirement – Iowa DNR Construction Permit 03-A-334

[(1)] Minimum test run time = 1 hour

The owner of this equipment or the owner's authorized agent shall provide written notice to the Director, not less than 30 days before a required stack test or performance evaluation of a continuous emission monitor. Results of the test shall be submitted in writing to the Director in the form of a comprehensive report within 6 weeks of the completion of the testing. 567 IAC 25.1(7)

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)"b"

Emission Point ID Number: EP 4

Associated Equipment

Associated Emission Unit ID Number(s): EU 4, EU 5
Emissions Control Equipment ID Number: CE 4
Emissions Control Equipment Description: Baghouse (vents inside building)

Applicable Requirements

Emission Unit vented through this Emission Point: EU 4
Emission Unit Description: Secondary Crusher
Raw Material/Fuel: Rock
Rated Capacity: 294 tons/hr

Emission Unit vented through this Emission Point: EU 5
Emission Unit Description: Belt Conveyor
Raw Material/Fuel: Crushed Rock
Rated Capacity: 294 tons/hr

Emission Limits (lb/hr, gr/dscf, lb/MMBtu, % opacity, etc.)
The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity/Particulate Matter
Emission Limit(s): Per 567 IAC 23.1(2)"bbb" [New Source Performance Standards (NSPS) Subpart OOO (Standards of Performance for Nonmetallic Mineral Processing Plants)] on and after the sixtieth day after achieving the maximum production rate at which the affected facility (Secondary Crusher & Belt Conveyor) listed in this permit (02-A-664) will be operated, but no later than one hundred eighty (180) days after the initial startup, no owner or operator shall cause to be discharged into the atmosphere from:

(a) Any building enclosing the affected facilities (Secondary Crusher & Belt Conveyor) listed in this permit (02-A-683-S1) any visible fugitive emissions except emissions from a vent as defined in § 60.671 of 40 CFR.
(b) Any vent of any building enclosing the affected facilities (Secondary Crusher & Belt Conveyor) listed in this permit (02-A-683-S1) emissions which exceed:
- Particulate matter in excess of 0.05 grams/dscm (0.022 grains/dscf).
- Opacity greater than 7 %.

Authority for Requirement: Iowa DNR Construction Permit 02-A-683-S1
567 IAC 23.1(2)"bbb", 40 CFR 60.672(a)(2), (e)(1)

Pollutant: PM_{10}
Emission Limit(s): 0.64 lb/hr[(1)]
Authority for Requirement: Iowa DNR Construction Permit 02-A-683-S1

Pollutant: Particulate Matter
Emission Limit(s): 0.64 lb/hr[(1)]
Authority for Requirement: Iowa DNR Construction Permit 02-A-683-S1

[(1)] Standard is expressed as the average of 3 runs.

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Process throughput:

A. The process rate (quantity of nonmetallic minerals processed, in tons/hr) of this system shall not exceed an average of 294 tons per hour calculated on a daily basis.

Reporting & Record keeping:

The following records shall be maintained on-site for five (5) years and available for inspection upon request by representatives of the Department of Natural Resources:

A. The facility shall record the amount of nonmetallic minerals processed, in tons, for this system on a daily basis.
B. The facility shall record the hours of operation for this system on a daily basis.
C. The facility shall calculate and record on a daily basis the average hourly production rate (tons/hr) for this system based on daily usage and daily hours of operation.

Authority for Requirement: Iowa DNR Construction Permit 02-A-683-S1

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Exhaust Flow Rate (scfm): 3,400
Stack Temperature (^{o}F): 70
Authority for Requirement: Iowa DNR Construction Permit 02-A-683-S1

It shall be the owner's responsibility to ensure that construction conforms with the emission point characteristics stated above. If it is determined that any of the emission point characteristics are different than stated above, the owner must notify the Department and obtain a construction permit amendment, if required.

Periodic Monitoring Requirements

The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.

Opacity Monitoring

The facility shall check the opacity weekly during a period when the emission unit on this emission point is at or near full capacity and record the reading. Maintain a written record of the observation and any action resulting from the observation for a minimum of five years. The facility shall use EPA Method 22.

If visible emissions, other than emissions from a vent as defined in 40 CFR 60.671, are observed, this would be a violation and corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions.

If visible emissions are observed from a vent, a Method 9 reading must be performed by a certified smoke reader. If an opacity > 7% is observed from the vent, this would be a violation and corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake opacity readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits.

Weekly observations shall be conducted for a minimum of eight (8) consecutive weeks after permit issuance.

If no visible emissions are observed during this period then:

- Opacity observations shall be made once every other week for a duration of sixteen (16) weeks. If visible emissions are observed, monitoring reverts back to weekly.

If no visible emissions are observed during this period then:

- Observations shall be made once per month. If visible emissions are observed, monitoring reverts back to weekly.

If the source reverts back to weekly monitoring at any time, monitoring frequency will progress in an identical manner from the initial monitoring schedule.

Recordkeeping:

Maintain a written record of the observation and any action resulting from the observation. Records shall be maintained on-site for five (5) years and made available to representatives of the DNR upon request.

Stack Testing:

Pollutant - Opacity
Stack Test to be Completed – December, 2002
Test Method – 40 CFR 60, Appendix A, Method 22
Test Result – No Visible Emissions
Authority for Requirement – Iowa DNR Construction Permit 02-A-683
567 IAC 23.1(2)"bbb", 40 CFR 60.675(d)

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☒ No ☐

Facility operation and maintenance plans must be sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the applicable requirements.

Facility operation and maintenance plans are to be developed by the facility within six(6) months of the issuance date of this permit and the data pertaining to the plan maintained on site for at least 5 years. The plan and associated recordkeeping provides documentation of this facility's implementation of its obligation to operate according to good air pollution control practice.

Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with this emission point.

Authority for Requirement: 567 IAC 22.108(3)"b"

Emission Point ID Number: EP 6

Associated Equipment

Associated Emission Unit ID Number: EU 6

Applicable Requirements

Emission Unit vented through this Emission Point: EU 6
Emission Unit Description: Rock Shed
Raw Material/Fuel: Crushed Rock
Rated Capacity: 400 tons/hr

Emission Limits (lb/hr, gr/dscf, lb/MMBtu, % opacity, etc.)
The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Fugitive Dust
Emission Limit: No person shall allow, cause or permit any materials to be handled, transported or stored; or a building, its appurtenances or a construction haul road to be used, constructed, altered, repaired or demolished, without taking reasonable precautions to prevent a nuisance. All persons shall take reasonable precautions to prevent the discharge of visible emissions of fugitive dusts beyond the lot line of the property on which the emissions originate.

Authority for Requirement: 567 IAC 23.3(2)"c"

Periodic Monitoring Requirements
The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)"b"

Emission Point ID Number: EP 7 (Vents Inside)

Associated Equipment

Associated Emission Unit ID Number: EU 7

Applicable Requirements

Emission Unit vented through this Emission Point: EU 7
Emission Unit Description: Rock Silo Screen
Raw Material/Fuel: Crushed Rock
Rated Capacity: 294 tons/hr

Emission Limits (lb/hr, gr/dscf, lb/MMBtu, % opacity, etc.)
The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity/Particulate Matter
Emission Limit(s): Per 567 IAC 23.1(2)"bbb" [New Source Performance Standards (NSPS) Subpart OOO (Standards of Performance for Nonmetallic Mineral Processing Plants)] on and after the sixtieth day after achieving the maximum production rate at which the affected facility (Rock Silo Screen) listed in this permit (02-A-665-S1) will be operated, but no later than one hundred eighty (180) days after the initial startup, no owner or operator shall cause to be discharged into the atmosphere from:

(a) Any building enclosing the affected facility (Rock Silo Screen) listed in this permit (02-A-665-S1) any visible fugitive emissions except emissions from a vent as defined in § 60.671 of 40 CFR.
(b) Any vent of any building enclosing the affected facility (Rock Silo Screen) listed in this permit (02-A-665-S1) emissions which exceed:
- Particulate matter in excess of 0.05 grams/dscm (0.022 grains/dscf).
- Opacity greater than 7 %.

Authority for Requirement: Iowa DNR Construction Permit 02-A-665-S1
567 IAC 23.1(2)"bbb", 40 CFR 60.672(a)(2), (e)(1)

Pollutant: PM_{10}
Emission Limit(s): 6.0 lb/hr[(1)]
Authority for Requirement: Iowa DNR Construction Permit 02-A-665-S1

Pollutant: Particulate Matter
Emission Limit(s): 6.0 lb/hr[(1)]
Authority for Requirement: Iowa DNR Construction Permit 02-A-665-S1

[(1)] Standard expressed as the average of 3 runs.

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Process throughput:

A. The process rate (quantity of nonmetallic minerals processed, in tons/hr) of this system shall not exceed an average of 294 tons per hour calculated on a daily basis.

Reporting & Record keeping:

The following records shall be maintained on-site for five (5) years and available for inspection upon request by representatives of the Department of Natural Resources:

A. The facility shall record the amount of nonmetallic minerals processed, in tons, for this system on a daily basis.
B. The facility shall record the hours of operation for this system on a daily basis.
C. The facility shall calculate and record on a daily basis the average hourly production rate (tons/hr) for this system based on daily usage and daily hours of operation.

Authority for Requirement: Iowa DNR Construction Permit 02-A-665-S1

Periodic Monitoring Requirements

The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.

Opacity Monitoring

The facility shall check the opacity weekly during a period when the emission unit on this emission point is at or near full capacity and record the reading. Maintain a written record of the observation and any action resulting from the observation for a minimum of five years. The facility shall use EPA Method 22.

If visible emissions, other than emissions from a vent as defined in 40 CFR 60.671, are observed, this would be a violation and corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions.

If visible emissions are observed from a vent, a Method 9 reading must be performed by a certified smoke reader. If an opacity > 7% is observed from the vent, this would be a violation and corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake opacity readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits.

Weekly observations shall be conducted for a minimum of eight (8) consecutive weeks after permit issuance.

<u>If no visible emissions are observed during this period then</u>:

- Opacity observations shall be made once every other week for a duration of sixteen (16) weeks. If visible emissions are observed, monitoring reverts back to weekly.

If no visible emissions are observed during this period then:

- Observations shall be made once per month. If visible emissions are observed, monitoring reverts back to weekly.

If the source reverts back to weekly monitoring at any time, monitoring frequency will progress in an identical manner from the initial monitoring schedule.

Recordkeeping:
Maintain a written record of the observation and any action resulting from the observation. Records shall be maintained on-site for five (5) years and made available to representatives of the DNR upon request.

Stack Testing:

Pollutant - Opacity
Stack Test to be Completed – December, 2002
Test Method – 40 CFR 60, Appendix A, Method 22
Test Result – No Visible Emissions
Authority for Requirement – Iowa DNR Construction Permit 02-A-665
567 IAC 23.1(2)"bbb", 40 CFR 60.675(d)

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)"b"

Emission Point ID Number: EP 9

Associated Equipment

Associated Emission Unit ID Number(s): EU 8, EU 9
Emissions Control Equipment ID Number: CE 8, CE 9
Emissions Control Equipment Description: CE 8 - Cyclone, CE 9 - Baghouse

Applicable Requirements

Emission Unit vented through this Emission Point: EU 8
Emission Unit Description: #1 Raymond Mill
Raw Material/Fuel: Crushed Rock
Rated Capacity: 30 tons/hr

Emission Unit vented through this Emission Point: EU 9
Emission Unit Description: #1 Raymond Mill (Combustion)
Raw Material/Fuel: Natural Gas, Distillate Fuel Oil (backup)
Rated Capacity: 4.26 MMBtu/hr

Emission Limits (lb/hr, gr/dscf, lb/MMBtu, % opacity, etc.)
The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity
Emission Limit(s): 40 %[(1)]
Authority for Requirement: 567 IAC 23.3(2)"d" Iowa DNR Construction Permit 02-A-666-S1

[(1)] Per DNR Air Quality Policy 3-b-08, Opacity Limits, an exceedance of the indicator opacity of 10% will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. The permit holder shall also file an "indicator opacity exceedance report" with the DNR field office and keep records as required in the policy. If exceedances continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: PM_{10}
Emission Limit(s): 3.6 lb/hr[(2)]
Authority for Requirement: Iowa DNR Construction Permit 02-A-666-S1

Pollutant: Particulate Matter
Emission Limit(s): 0.6 lb/MMBtu, 3.6 lb/hr[(2)]
Authority for Requirement: 567 IAC 23.3(2)"b" Iowa DNR Construction Permit 02-A-666-S1

[(2)] Standard expressed as the average of 3 runs.

Pollutant: Sulfur Dioxide (SO_2)
Emission Limit(s): 2.5 lb/MMBtu (limit when burning fuel oil)
Authority for Requirement: 567 IAC 23.3(3)"b"

Pollutant: Sulfur Dioxide
Emission Limit(s): 500 ppmv (limit when burning natural gas)
Authority for Requirement: 567 IAC 23.3(3)"e" Iowa DNR Construction Permit 02-A-666-S1

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Process throughput:

A. Emission unit 9 (Raymond Mill Combustion) shall operate on either natural gas or fuel oil.
B. The sulfur content of the fuel used shall not exceed 0.3% by weight.

Reporting & Record keeping:

The following records shall be maintained on-site for five (5) years and available for inspection upon request by representatives of the Department of Natural Resources:

A. The fuel used and the sulfur content of the fuel.

Authority for Requirement: Iowa DNR Construction Permit 02-A-666-S1

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height (feet): 70
Stack Diameter (inches): 20
Stack Exhaust Flow Rate (scfm): 8,300
Stack Temperature (^oF): 180
Vertical, Unobstructed Discharge Required: Yes ☒ No ☐
Authority for Requirement: Iowa DNR Construction Permit 02-A-666-S1

It shall be the owner's responsibility to ensure that construction conforms with the emission point characteristics stated above. If it is determined that any of the emission point characteristics are different than stated above, the owner must notify the Department and obtain a construction permit amendment, if required.

Periodic Monitoring Requirements

The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.

(1) Stack Testing:

Pollutant - PM_{10}
Stack Test to be Completed by (date) - 2 years from permit issuance
Test Method - 201 A with 202, 40 CFR 51 (2)
Authority for Requirement - 567 IAC 22.108(3)

Pollutant - Particulate Matter
Stack Test to be Completed by (date) - 2 years from permit issuance
Test Method - Iowa Compliance Sampling Manual Method 5
Authority for Requirement - 567 IAC 22.108(3)

Notes:
(1) Testing this emission point can be taken as representative of EP 9, EP 11, and EP 13. The results of the test will be taken as representative for all three emission points. If the tested emission point shows an exceedence of the applicable emission limit, then all three emission points will be considered to be out of compliance with their respective emission limits.
(2) Or approved alternative.

The owner of this equipment or the owner's authorized agent shall provide written notice to the Director, not less than 30 days before a required stack test or performance evaluation of a continuous emission monitor. Results of the test shall be submitted in writing to the Director in the form of a comprehensive report within 6 weeks of the completion of the testing. 567 IAC 25.1(7)

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☒ No ☐

Facility operation and maintenance plans must be sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the applicable requirements.

Facility operation and maintenance plans are to be developed by the facility within six(6) months of the issuance date of this permit and the data pertaining to the plan maintained on site for at least 5 years. The plan and associated recordkeeping provides documentation of this facility's implementation of its obligation to operate according to good air pollution control practice.

Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with this emission point.

Authority for Requirement: 567 IAC 22.108(3)"b"

Emission Point ID Number: EP 11

Associated Equipment

Associated Emission Unit ID Number(s): EU 10, EU 11
Emissions Control Equipment ID Number: CE 10, CE 11
Emissions Control Equipment Description: CE 10 - Cyclone, CE 11 - Baghouse

Applicable Requirements

Emission Unit vented through this Emission Point: EU 10
Emission Unit Description: #2 Raymond Mill
Raw Material/Fuel: Crushed Rock
Rated Capacity: 30 tons/hr

Emission Unit vented through this Emission Point: EU 11
Emission Unit Description: #2 Raymond Mill (Combustion)
Raw Material/Fuel: Natural Gas, Distillate Fuel Oil (backup)
Rated Capacity: 4.26 MMBtu/hr

Emission Limits (lb/hr, gr/dscf, lb/MMBtu, % opacity, etc.)
The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity
Emission Limit(s): 40 %[(1)]
Authority for Requirement: 567 IAC 23.3(2)"d" Iowa DNR Construction Permit 02-A-667-S1

[(1)] Per DNR Air Quality Policy 3-b-08, Opacity Limits, an exceedance of the indicator opacity of 10% will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. The permit holder shall also file an "indicator opacity exceedance report" with the DNR field office and keep records as required in the policy. If exceedances continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: PM_{10}
Emission Limit(s): 3.6 lb/hr[(2)]
Authority for Requirement: Iowa DNR Construction Permit 02-A-667-S1

Pollutant: Particulate Matter
Emission Limit(s): 0.6 lb/MMBtu, 3.6 lb/hr[(2)]
Authority for Requirement: 567 IAC 23.3(2)"b" Iowa DNR Construction Permit 02-A-667-S1

[(2)] Standard expressed as the average of 3 runs.

Pollutant: Sulfur Dioxide (SO_2)
Emission Limit(s): 2.5 lb/MMBtu (limit when burning fuel oil)
Authority for Requirement: 567 IAC 23.3(3)"b"

Pollutant: Sulfur Dioxide
Emission Limit(s): 500 ppmv (limit when burning natural gas)
Authority for Requirement: 567 IAC 23.3(3)"e" Iowa DNR Construction Permit 02-A-667-S1

Operational Limits & Requirements
The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Process throughput:
A. Emission unit 11 (Raymond Mill Combustion) shall operate on either natural gas or fuel oil.
B. The sulfur content of the fuel used shall not exceed 0.3% by weight.

Reporting & Record keeping:
The following records shall be maintained on-site for five (5) years and available for inspection upon request by representatives of the Department of Natural Resources:
A. The fuel used and the sulfur content of the fuel.

Authority for Requirement: Iowa DNR Construction Permit 02-A-667-S1

Emission Point Characteristics
The emission point shall conform to the specifications listed below.

Stack Height (feet): 70
Stack Diameter (inches): 20
Stack Exhaust Flow Rate (scfm): 8,300
Stack Temperature (^oF): 180
Vertical, Unobstructed Discharge Required: Yes ☒ No ☐
Authority for Requirement: Iowa DNR Construction Permit 02-A-667-S1

It shall be the owner's responsibility to ensure that construction conforms with the emission point characteristics stated above. If it is determined that any of the emission point characteristics are different than stated above, the owner must notify the Department and obtain a construction permit amendment, if required.

Periodic Monitoring Requirements

The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.

(1) Stack Testing:

Pollutant - PM_{10}
Stack Test to be Completed by (date) - 2 years from permit issuance
Test Method - 201 A with 202, 40 CFR 51 (2)
Authority for Requirement - 567 IAC 22.108(3)

Pollutant - Particulate Matter
Stack Test to be Completed by (date) - 2 years from permit issuance
Test Method - Iowa Compliance Sampling Manual Method 5
Authority for Requirement - 567 IAC 22.108(3)

Notes:
(1) Testing this emission point can be taken as representative of EP 9, EP 11, and EP 13. The results of the test will be taken as representative for all three emission points. If the tested emission point shows an exceedence of the applicable emission limit, then all three emission points will be considered to be out of compliance with their respective emission limits.
(2) Or approved alternative.

The owner of this equipment or the owner's authorized agent shall provide written notice to the Director, not less than 30 days before a required stack test or performance evaluation of a continuous emission monitor. Results of the test shall be submitted in writing to the Director in the form of a comprehensive report within 6 weeks of the completion of the testing. 567 IAC 25.1(7)

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☒ No ☐

Facility operation and maintenance plans must be sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the applicable requirements.

Facility operation and maintenance plans are to be developed by the facility within six(6) months of the issuance date of this permit and the data pertaining to the plan maintained on site for at least 5 years. The plan and associated recordkeeping provides documentation of this facility's implementation of its obligation to operate according to good air pollution control practice.

Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with this emission point.

Authority for Requirement: 567 IAC 22.108(3)"b"

Emission Point ID Number: EP 13

Associated Equipment

Associated Emission Unit ID Number(s): EU 12, EU 13
Emissions Control Equipment ID Number: CE 12, CE 13
Emissions Control Equipment Description: CE 12 - Cyclone, CE 13 - Baghouse

Applicable Requirements

Emission Unit vented through this Emission Point: EU 12
Emission Unit Description: #3 Raymond Mill
Raw Material/Fuel: Crushed Rock
Rated Capacity: 30 tons/hr

Emission Unit vented through this Emission Point: EU 13
Emission Unit Description: #3 Raymond Mill (Combustion)
Raw Material/Fuel: Natural Gas, Distillate Fuel Oil (backup)
Rated Capacity: 4.26 MMBtu/hr

Emission Limits (lb/hr, gr/dscf, lb/MMBtu, % opacity, etc.)
The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity
Emission Limit(s): 40 %[(1)]
Authority for Requirement: 567 IAC 23.3(2)"d" Iowa DNR Construction Permit 02-A-668-S1

[(1)] Per DNR Air Quality Policy 3-b-08, Opacity Limits, an exceedance of the indicator opacity of 10% will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. The permit holder shall also file an "indicator opacity exceedance report" with the DNR field office and keep records as required in the policy. If exceedances continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: PM_{10}
Emission Limit(s): 3.6 lb/hr[(2)]
Authority for Requirement: Iowa DNR Construction Permit 02-A-668-S1

Pollutant: Particulate Matter
Emission Limit(s): 0.6 lb/MMBtu, 3.6 lb/hr[(2)]
Authority for Requirement: 567 IAC 23.3(2)"b" Iowa DNR Construction Permit 02-A-668-S1

[(2)] Standard expressed as the average of 3 runs.

Pollutant: Sulfur Dioxide (SO_2)
Emission Limit(s): 2.5 lb/MMBtu (limit when burning fuel oil)
Authority for Requirement: 567 IAC 23.3(3)"b"

Pollutant: Sulfur Dioxide
Emission Limit(s): 500 ppmv (limit when burning natural gas)
Authority for Requirement: 567 IAC 23.3(3)"e" Iowa DNR Construction Permit 02-A-668-S1

Operational Limits & Requirements
The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Process throughput:
A. Emission unit 13 (Raymond Mill Combustion) shall operate on either natural gas or fuel oil.
B. The sulfur content of the fuel used shall not exceed 0.3% by weight.

Reporting & Record keeping:
The following records shall be maintained on-site for five (5) years and available for inspection upon request by representatives of the Department of Natural Resources:
A. The fuel used and the sulfur content of the fuel.

Authority for Requirement: Iowa DNR Construction Permit 02-A-668-S1

Emission Point Characteristics
The emission point shall conform to the specifications listed below.

Stack Height (feet): 70
Stack Diameter (inches): 20
Stack Exhaust Flow Rate (scfm): 8,300
Stack Temperature (^oF): 180
Vertical, Unobstructed Discharge Required: Yes ☒ No ☐
Authority for Requirement: Iowa DNR Construction Permit 02-A-668-S1

It shall be the owner's responsibility to ensure that construction conforms with the emission point characteristics stated above. If it is determined that any of the emission point characteristics are different than stated above, the owner must notify the Department and obtain a construction permit amendment, if required.

Periodic Monitoring Requirements

The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.

(1) Stack Testing:

Pollutant - PM_{10}
Stack Test to be Completed by (date) - 2 years from permit issuance
Test Method - 201 A with 202, 40 CFR 51 (2)
Authority for Requirement - 567 IAC 22.108(3)

Pollutant - Particulate Matter
Stack Test to be Completed by (date) - 2 years from permit issuance
Test Method - Iowa Compliance Sampling Manual Method 5
Authority for Requirement - 567 IAC 22.108(3)

Notes:
(1) Testing this emission point can be taken as representative of EP 9, EP 11, and EP 13. The results of the test will be taken as representative for all three emission points. If the tested emission point shows an exceedence of the applicable emission limit, then all three emission points will be considered to be out of compliance with their respective emission limits.
(2) Or approved alternative.

The owner of this equipment or the owner's authorized agent shall provide written notice to the Director, not less than 30 days before a required stack test or performance evaluation of a continuous emission monitor. Results of the test shall be submitted in writing to the Director in the form of a comprehensive report within 6 weeks of the completion of the testing. 567 IAC 25.1(7)

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☒ No ☐

Facility operation and maintenance plans must be sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the applicable requirements.

Facility operation and maintenance plans are to be developed by the facility within six(6) months of the issuance date of this permit and the data pertaining to the plan maintained on site for at least 5 years. The plan and associated recordkeeping provides documentation of this facility's implementation of its obligation to operate according to good air pollution control practice.

Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with this emission point.

Authority for Requirement: 567 IAC 22.108(3)"b"

Emission Point ID Number: 14

Associated Equipment

Associated Emission Unit ID Number(s): EU 14
Emissions Control Equipment ID Number: CE 14
Emissions Control Equipment Description: Baghouse

Applicable Requirements

Emission Unit vented through this Emission Point: EU 14
Emission Unit Description: Stucco Distribution
Raw Material/Fuel: Stucco
Rated Capacity: 45 tons/hr

Emission Limits (lb/hr, gr/dscf, lb/MMBtu, % opacity, etc.)
The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity
Emission Limit(s): 40% (1)
Authority for Requirement: Iowa DNR Construction Permit 99-A-642-S1
567 IAC 23.3(2)"d"

(1) Per DNR Air Quality Policy 3-b-08, Opacity Limits, an exceedence of the indicator opacity of 10% will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedence. The permit holder shall also file an "indicator opacity exceedence report" with the DNR field office and keep records as required in the policy. If exceedences continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: PM_{10}
Emission Limit(s): 0.6 lb/hr(2)
Authority for Requirement: Iowa DNR Construction Permit 99-A-642-S1

Pollutant: Particulate Matter
Emission Limit(s): 0.1 gr/dscf; 0.6 lb/hr(2)
Authority for Requirement: Iowa DNR Construction Permit 99-A-642-S1
567 IAC 23.3(2)"a"

(2) Standard is expressed as the average of 3 runs.

Emission Point Characteristics
The source shall be connected to the stack designated below.

Stack Height (feet): 70
Stack Diameter (inches): 12
Stack Exhaust Flow Rate (scfm): 3,200
Stack Temperature (^{o}F): 200
Vertical, Unobstructed Discharge Required: Yes ☒ No ☐
Authority for Requirement: Iowa DNR Construction Permit 99-A-642-S1

It shall be the owner's responsibility to ensure that construction conforms with the emission point characteristics stated above. If it is determined that any of the emission point characteristics are different than stated above, the owner must notify the Department and obtain a construction permit amendment, if required.

Periodic Monitoring Requirements
The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.

Stack Testing:

Pollutant - PM_{10}
Stack Test to be Completed by (date) - 2 years from permit issuance
Test Method - 40 CFR 51, Appendix M, 201A with 202 (1)
Authority for Requirement - 567 IAC 22.108(3)

Pollutant - Particulate Matter
Stack Test to be Completed by (date) - 2 years from permit issuance
Test Method - Iowa Compliance Sampling Manual Method 5
Authority for Requirement - 567 IAC 22.108(3)

Notes:
(1) Or approved alternative.

The owner of this equipment or the owner's authorized agent shall provide written notice to the Director, not less than 30 days before a required stack test or performance evaluation of a continuous emission monitor. Results of the test shall be submitted in writing to the Director in the form of a comprehensive report within 6 weeks of the completion of the testing. 567 IAC 25.1(7)

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☒ No ☐

Facility operation and maintenance plans must be sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the applicable requirements.

Facility operation and maintenance plans are to be developed by the facility within six(6) months of the issuance date of this permit and the data pertaining to the plan maintained on site for at least 5 years. The plan and associated recordkeeping provides documentation of this facility's implementation of its obligation to operate according to good air pollution control practice.

Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with this emission point.

Authority for Requirement: 567 IAC 22.108(3)"b"

Emission Point ID Number: EP 15

Associated Equipment

Associated Emission Unit ID Number: EU 15
Emissions Control Equipment ID Number: CE 15
Emissions Control Equipment Description: Baghouse

Applicable Requirements

Emission Unit vented through this Emission Point: EU 15
Emission Unit Description: #1 Stucco Kettle
Raw Material/Fuel: Stucco
Rated Capacity: 12 tons/hr

Emission Limits (lb/hr, gr/dscf, lb/MMBtu, % opacity, etc.)
The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity
Emission Limit(s): 40 %[(1)]
Authority for Requirement: 567 IAC 23.3(2)"d" Iowa DNR Construction Permit 02-A-670

[(1)] Per DNR Air Quality Policy 3-b-08, Opacity Limits, an exceedence of the indicator opacity of 10% will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedence. The permit holder shall also file an "indicator opacity exceedence report" with the DNR field office and keep records as required in the policy. If exceedences continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: PM_{10}
Emission Limit(s): 0.36 lb/hr[(2)]
Authority for Requirement: Iowa DNR Construction Permit 02-A-670

Pollutant: Particulate Matter
Emission Limit(s): 0.1 gr/scf, 0.36 lb/hr[(2)]
Authority for Requirement: 567 IAC 23.3(2)"a" Iowa DNR Construction Permit 02-A-670

Pollutant: Sulfur Dioxide (SO_2)
Emission Limit(s): 500 ppmv
Authority for Requirement: 567 IAC 23.3(3)"e"

[(2)] Standard expressed as the average of 3 runs.

Emission Point Characteristics
The emission point shall conform to the specifications listed below.

Stack Height (feet): 50
Stack Diameter (inches): 14
Stack Exhaust Flow Rate (scfm): 4,200
Stack Temperature (^{o}F): 300
Vertical, Unobstructed Discharge Required: Yes ☒ No ☐
Authority for Requirement: Iowa DNR Construction Permit 02-A-670

It shall be the owner's responsibility to ensure that construction conforms with the emission point characteristics stated above. If it is determined that any of the emission point characteristics are different than stated above, the owner must notify the Department and obtain a construction permit amendment, if required.

Periodic Monitoring Requirements
The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.

Stack Testing:

Pollutant - PM_{10}[(1)]
Stack Test to be Completed by (date) - 2 years from permit issuance
Test Method - 201 A with 202, 40 CFR 51 [(2)]
Authority for Requirement - 567 IAC 22.108(3)

Pollutant - Particulate Matter[(1)]
Stack Test to be Completed by (date) - 2 years from permit issuance
Test Method - Iowa Compliance Sampling Manual Method 5
Authority for Requirement - 567 IAC 22.108(3)

Pollutant – Sulfur Dioxide (SO_2)[(3)]
Stack Test to be Completed by (date) - 2 years from permit issuance
Test Method – 40 CFR 60, Appendix A, Method 6C
Authority for Requirement - 567 IAC 22.108(3)

Notes:
(1) The facility may choose to perform one test on one of Stucco Kettle numbers 1, 2, 3, and 5 (EP's 15, 17, 19, & 23) to show compliance with the applicable emission limits for the four (4) kettles. If the one tested kettle exceeds the applicable emission limit, then all four (4) kettles will also be considered to be out of compliance with their respective emission limits.
(2) Or approved alternative.
(3) The facility may choose to perform one SO_2 test on one of the five (5) Stucco Kettles (EP's 15, 17, 19, 21, & 23) to show compliance with the SO_2 emission limits for all five (5) kettles. If the one tested kettle exceeds the SO_2 emission limit, then all five (5) kettles will also be considered to be out of compliance with their respective SO_2 emission limits.

The owner of this equipment or the owner's authorized agent shall provide written notice to the Director, not less than 30 days before a required stack test or performance evaluation of a continuous emission monitor. Results of the test shall be submitted in writing to the Director in the form of a comprehensive report within 6 weeks of the completion of the testing. 567 IAC 25.1(7)

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☒ No ☐

Facility operation and maintenance plans must be sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the applicable requirements.

Facility operation and maintenance plans are to be developed by the facility within six(6) months of the issuance date of this permit and the data pertaining to the plan maintained on site for at least 5 years. The plan and associated recordkeeping provides documentation of this facility's implementation of its obligation to operate according to good air pollution control practice.

Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with this emission point.

Authority for Requirement: 567 IAC 22.108(3)"b"

Emission Point ID Number: EP 16

Associated Equipment

Associated Emission Unit ID Number: EU 16

Applicable Requirements

Emission Unit vented through this Emission Point: EU 16
Emission Unit Description: #1 Stucco Kettle (Combustion)
Raw Material/Fuel: Natural Gas, Distillate Fuel Oil (backup)
Rated Capacity: 12.7 MMBtu/hr

Emission Limits (lb/hr, gr/dscf, lb/MMBtu, % opacity, etc.)
The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity
Emission Limit(s): 40 %[(1)]
Authority for Requirement: 567 IAC 23.3(2)"d" Iowa DNR Construction Permit 02-A-671

[(1)] Per DNR Air Quality Policy 3-b-08, Opacity Limits, an exceedence of the indicator opacity of 10% will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedence. The permit holder shall also file an "indicator opacity exceedence report" with the DNR field office and keep records as required in the policy. If exceedences continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: PM_{10}
Emission Limit(s): 0.20 lb/hr[(2)]
Authority for Requirement: Iowa DNR Construction Permit 02-A-671

Pollutant: Particulate Matter
Emission Limit(s): 0.6 lb/MMBtu, 0.20 lb/hr[(2)]
Authority for Requirement: 567 IAC 23.3(2)"b" Iowa DNR Construction Permit 02-A-671

Pollutant: Sulfur Dioxide (SO_2)
Emission Limit(s): 2.5 lb/MMBtu (limit when burning fuel oil)
Authority for Requirement: 567 IAC 23.3(3)"b"

Pollutant: Sulfur Dioxide
Emission Limit(s): 500 ppmv (limit when burning natural gas)
Authority for Requirement: 567 IAC 23.3(3)"e" Iowa DNR Construction Permit 02-A-671

[(2)] Standard expressed as the average of 3 runs.

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Process throughput:

A. The emission unit shall operate on either natural gas or fuel oil.
B. The sulfur content of the fuel used shall not exceed 0.3% by weight.

Reporting & Record keeping:

The following records shall be maintained on-site for five (5) years and available for inspection upon request by representatives of the Department of Natural Resources:

A. The fuel used and the sulfur content of the fuel.

Authority for Requirement: Iowa DNR Construction Permit 02-A-671

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height (feet): 50
Stack Diameter (inches): 21
Stack Exhaust Flow Rate (scfm): 1,400
Stack Temperature (^{o}F): 300
Vertical, Unobstructed Discharge Required: Yes ☒ No ☐
Authority for Requirement: Iowa DNR Construction Permit 02-A-671

It shall be the owner's responsibility to ensure that construction conforms with the emission point characteristics stated above. If it is determined that any of the emission point characteristics are different than stated above, the owner must notify the Department and obtain a construction permit amendment, if required.

Periodic Monitoring Requirements

The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)"b"

Emission Point ID Number: EP 17

Associated Equipment

Associated Emission Unit ID Number: EU 17
Emissions Control Equipment ID Number: CE 17
Emissions Control Equipment Description: Baghouse

Applicable Requirements

Emission Unit vented through this Emission Point: EU 17
Emission Unit Description: #2 Stucco Kettle
Raw Material/Fuel: Stucco
Rated Capacity: 12 tons/hr

Emission Limits (lb/hr, gr/dscf, lb/MMBtu, % opacity, etc.)
The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity
Emission Limit(s): 40 %[(1)]
Authority for Requirement: 567 IAC 23.3(2)"d" Iowa DNR Construction Permit 02-A-672

[(1)] Per DNR Air Quality Policy 3-b-08, Opacity Limits, an exceedence of the indicator opacity of 10% will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedence. The permit holder shall also file an "indicator opacity exceedence report" with the DNR field office and keep records as required in the policy. If exceedences continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: PM_{10}
Emission Limit(s): 0.24 lb/hr[(2)]
Authority for Requirement: Iowa DNR Construction Permit 02-A-672

Pollutant: Particulate Matter
Emission Limit(s): 0.1 gr/scf, 0.24 lb/hr[(2)]
Authority for Requirement: 567 IAC 23.3(2)"a" Iowa DNR Construction Permit 02-A-672

Pollutant: Sulfur Dioxide (SO_2)
Emission Limit(s): 500 ppmv
Authority for Requirement: 567 IAC 23.3(3)"e"

[(2)] Standard expressed as the average of 3 runs.

Emission Point Characteristics
The emission point shall conform to the specifications listed below.

Stack Height (feet): 50
Stack Diameter (inches): 16
Stack Exhaust Flow Rate (scfm): 2,800
Stack Temperature (^{o}F): 300
Vertical, Unobstructed Discharge Required: Yes ☒ No ☐
Authority for Requirement: Iowa DNR Construction Permit 02-A-672

It shall be the owner's responsibility to ensure that construction conforms with the emission point characteristics stated above. If it is determined that any of the emission point characteristics are different than stated above, the owner must notify the Department and obtain a construction permit amendment, if required.

Periodic Monitoring Requirements
The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.

Stack Testing:

Pollutant - PM_{10}[(1)]
Stack Test to be Completed by (date) - 2 years from permit issuance
Test Method - 201 A with 202, 40 CFR 51 [(2)]
Authority for Requirement - 567 IAC 22.108(3)

Pollutant - Particulate Matter[(1)]
Stack Test to be Completed by (date) - 2 years from permit issuance
Test Method - Iowa Compliance Sampling Manual Method 5
Authority for Requirement - 567 IAC 22.108(3)

Pollutant – Sulfur Dioxide (SO_2)[(3)]
Stack Test to be Completed by (date) - 2 years from permit issuance
Test Method – 40 CFR 60, Appendix A, Method 6C
Authority for Requirement - 567 IAC 22.108(3)

Notes:
(1) The facility may choose to perform one test on one of Stucco Kettle numbers 1, 2, 3, and 5 (EP's 15, 17, 19, & 23) to show compliance with the applicable emission limits for the four (4) kettles. If the one tested kettle exceeds the applicable emission limit, then all four (4) kettles will also be considered to be out of compliance with their respective emission limits.
(2) Or approved alternative.
(3) The facility may choose to perform one SO_2 test on one of the five (5) Stucco Kettles (EP's 15, 17, 19, 21, & 23) to show compliance with the SO_2 emission limits for all five (5) kettles. If the one tested kettle exceeds the SO_2 emission limit, then all five (5) kettles will also be considered to be out of compliance with their respective SO_2 emission limits.

The owner of this equipment or the owner's authorized agent shall provide written notice to the Director, not less than 30 days before a required stack test or performance evaluation of a continuous emission monitor. Results of the test shall be submitted in writing to the Director in the form of a comprehensive report within 6 weeks of the completion of the testing. 567 IAC 25.1(7)

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☒ No ☐

Facility operation and maintenance plans must be sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the applicable requirements.

Facility operation and maintenance plans are to be developed by the facility within six(6) months of the issuance date of this permit and the data pertaining to the plan maintained on site for at least 5 years. The plan and associated recordkeeping provides documentation of this facility's implementation of its obligation to operate according to good air pollution control practice.

Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with this emission point.

Authority for Requirement: 567 IAC 22.108(3)"b"

Emission Point ID Number: EP 18

Associated Equipment

Associated Emission Unit ID Number: EU 18

Applicable Requirements

Emission Unit vented through this Emission Point: EU 18
Emission Unit Description: #2 Stucco Kettle (Combustion)
Raw Material/Fuel: Natural Gas, Distillate Fuel Oil (backup)
Rated Capacity: 12.7 MMBtu/hr

Emission Limits (lb/hr, gr/dscf, lb/MMBtu, % opacity, etc.)
The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity
Emission Limit(s): 40 %[(1)]
Authority for Requirement: 567 IAC 23.3(2)"d" Iowa DNR Construction Permit 02-A-673

[(1)] Per DNR Air Quality Policy 3-b-08, Opacity Limits, an exceedence of the indicator opacity of 10% will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedence. The permit holder shall also file an "indicator opacity exceedence report" with the DNR field office and keep records as required in the policy. If exceedences continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: PM_{10}
Emission Limit(s): 0.20 lb/hr[(2)]
Authority for Requirement: Iowa DNR Construction Permit 02-A-673

Pollutant: Particulate Matter
Emission Limit(s): 0.6 lb/MMBtu, 0.20 lb/hr[(2)]
Authority for Requirement: 567 IAC 23.3(2)"b" Iowa DNR Construction Permit 02-A-673

Pollutant: Sulfur Dioxide (SO_2)
Emission Limit(s): 2.5 lb/MMBtu (limit when burning fuel oil)
Authority for Requirement: 567 IAC 23.3(3)"b"

Pollutant: Sulfur Dioxide
Emission Limit(s): 500 ppmv (limit when burning natural gas)
Authority for Requirement: 567 IAC 23.3(3)"e" Iowa DNR Construction Permit 02-A-673

[(2)] Standard expressed as the average of 3 runs.

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Process throughput:

A. The emission unit shall operate on either natural gas or fuel oil.
B. The sulfur content of the fuel used shall not exceed 0.3% by weight.

Reporting & Record keeping:

The following records shall be maintained on-site for five (5) years and available for inspection upon request by representatives of the Department of Natural Resources:

A. The fuel used and the sulfur content of the fuel.

Authority for Requirement: Iowa DNR Construction Permit 02-A-673

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height (feet): 50
Stack Diameter (inches): 25
Stack Exhaust Flow Rate (scfm): 1,400
Stack Temperature (^{o}F): 300
Vertical, Unobstructed Discharge Required: Yes ☒ No ☐
Authority for Requirement: Iowa DNR Construction Permit 02-A-673

It shall be the owner's responsibility to ensure that construction conforms with the emission point characteristics stated above. If it is determined that any of the emission point characteristics are different than stated above, the owner must notify the Department and obtain a construction permit amendment, if required.

Periodic Monitoring Requirements

The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)"b"

Emission Point ID Number: EP 19

Associated Equipment

Associated Emission Unit ID Number: EU 19
Emissions Control Equipment ID Number: CE 19
Emissions Control Equipment Description: Baghouse

Applicable Requirements

Emission Unit vented through this Emission Point: EU 19
Emission Unit Description: #3 Stucco Kettle
Raw Material/Fuel: Stucco
Rated Capacity: 12 tons/hr

Emission Limits (lb/hr, gr/dscf, lb/MMBtu, % opacity, etc.)
The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity
Emission Limit(s): 40 %[(1)]
Authority for Requirement: 567 IAC 23.3(2)"d" Iowa DNR Construction Permit 02-A-674

[(1)] Per DNR Air Quality Policy 3-b-08, Opacity Limits, an exceedence of the indicator opacity of 10% will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedence. The permit holder shall also file an "indicator opacity exceedence report" with the DNR field office and keep records as required in the policy. If exceedences continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: PM_{10}
Emission Limit(s): 0.36 lb/hr[(2)]
Authority for Requirement: Iowa DNR Construction Permit 02-A-674

Pollutant: Particulate Matter
Emission Limit(s): 0.1 gr/scf, 0.36 lb/hr[(2)]
Authority for Requirement: 567 IAC 23.3(2)"a" Iowa DNR Construction Permit 02-A-674

Pollutant: Sulfur Dioxide (SO_2)
Emission Limit(s): 500 ppmv
Authority for Requirement: 567 IAC 23.3(3)"e"

[(2)] Standard is expressed as the average of 3 runs.

Emission Point Characteristics
The emission point shall conform to the specifications listed below.

Stack Height (feet): 50
Stack Diameter (inches): 12
Stack Exhaust Flow Rate (scfm): 4,200
Stack Temperature (^{o}F): 300
Vertical, Unobstructed Discharge Required: Yes ☒ No ☐
Authority for Requirement: Iowa DNR Construction Permit 02-A-674

It shall be the owner's responsibility to ensure that construction conforms with the emission point characteristics stated above. If it is determined that any of the emission point characteristics are different than stated above, the owner must notify the Department and obtain a construction permit amendment, if required.

Periodic Monitoring Requirements
The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.

Stack Testing:

Pollutant - PM_{10}[(1)]
Stack Test to be Completed by (date) - 2 years from permit issuance
Test Method - 201 A with 202, 40 CFR 51 [(2)]
Authority for Requirement - 567 IAC 22.108(3)

Pollutant - Particulate Matter[(1)]
Stack Test to be Completed by (date) - 2 years from permit issuance
Test Method - Iowa Compliance Sampling Manual Method 5
Authority for Requirement - 567 IAC 22.108(3)

Pollutant – Sulfur Dioxide (SO_2)[(3)]
Stack Test to be Completed by (date) - 2 years from permit issuance
Test Method – 40 CFR 60, Appendix A, Method 6C
Authority for Requirement - 567 IAC 22.108(3)

Notes:
(1) The facility may choose to perform one test on one of Stucco Kettle numbers 1, 2, 3, and 5 (EP's 15, 17, 19, & 23) to show compliance with the applicable emission limits for the four (4) kettles. If the one tested kettle exceeds the applicable emission limit, then all four (4) kettles will also be considered to be out of compliance with their respective emission limits.
(2) Or approved alternative.
(3) The facility may choose to perform one SO_2 test on one of the five (5) Stucco Kettles (EP's 15, 17, 19, 21, & 23) to show compliance with the SO_2 emission limits for all five (5) kettles. If the one tested kettle exceeds the SO_2 emission limit, then all five (5) kettles will also be considered to be out of compliance with their respective SO_2 emission limits.

The owner of this equipment or the owner's authorized agent shall provide written notice to the Director, not less than 30 days before a required stack test or performance evaluation of a continuous emission monitor. Results of the test shall be submitted in writing to the Director in the form of a comprehensive report within 6 weeks of the completion of the testing. 567 IAC 25.1(7)

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☒ No ☐

Facility operation and maintenance plans must be sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the applicable requirements.

Facility operation and maintenance plans are to be developed by the facility within six(6) months of the issuance date of this permit and the data pertaining to the plan maintained on site for at least 5 years. The plan and associated recordkeeping provides documentation of this facility's implementation of its obligation to operate according to good air pollution control practice.

Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with this emission point.

Authority for Requirement: 567 IAC 22.108(3)"b"

Emission Point ID Number: EP 20

Associated Equipment

Associated Emission Unit ID Number: EU 20

Applicable Requirements

Emission Unit vented through this Emission Point: EU 20
Emission Unit Description: #3 Stucco Kettle (Combustion)
Raw Material/Fuel: Natural Gas, Distillate Fuel Oil (backup)
Rated Capacity: 12.7 MMBtu/hr

Emission Limits (lb/hr, gr/dscf, lb/MMBtu, % opacity, etc.)
The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity
Emission Limit(s): 40 %[(1)]
Authority for Requirement: 567 IAC 23.3(2)"d" Iowa DNR Construction Permit 02-A-675

[(1)] Per DNR Air Quality Policy 3-b-08, Opacity Limits, an exceedence of the indicator opacity of 10% will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedence. The permit holder shall also file an "indicator opacity exceedence report" with the DNR field office and keep records as required in the policy. If exceedences continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: PM_{10}
Emission Limit(s): 0.20 lb/hr[(2)]
Authority for Requirement: Iowa DNR Construction Permit 02-A-675

Pollutant: Particulate Matter
Emission Limit(s): 0.6 lb/MMBtu, 0.20 lb/hr[(2)]
Authority for Requirement: 567 IAC 23.3(2)"b" Iowa DNR Construction Permit 02-A-675

Pollutant: Sulfur Dioxide (SO_2)
Emission Limit(s): 2.5 lb/MMBtu (limit when burning fuel oil)
Authority for Requirement: 567 IAC 23.3(3)"b"

Pollutant: Sulfur Dioxide
Emission Limit(s): 500 ppmv (limit when burning natural gas)
Authority for Requirement: 567 IAC 23.3(3)"e" Iowa DNR Construction Permit 02-A-675

[(2)] Standard is expressed as the average of 3 runs.

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Process throughput:

A. The emission unit shall operate on either natural gas or fuel oil.
B. The sulfur content of the fuel used shall not exceed 0.3% by weight.

Reporting & Record keeping:

The following records shall be maintained on-site for five (5) years and available for inspection upon request by representatives of the Department of Natural Resources:

A. The fuel used and the sulfur content of the fuel.

Authority for Requirement: Iowa DNR Construction Permit 02-A-675

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height (feet): 50
Stack Diameter (inches): 20
Stack Exhaust Flow Rate (scfm): 1,400
Stack Temperature (^{o}F): 300
Vertical, Unobstructed Discharge Required: Yes ☒ No ☐
Authority for Requirement: Iowa DNR Construction Permit 02-A-675

It shall be the owner's responsibility to ensure that construction conforms with the emission point characteristics stated above. If it is determined that any of the emission point characteristics are different than stated above, the owner must notify the Department and obtain a construction permit amendment, if required.

Periodic Monitoring Requirements

The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)"b"

Emission Point ID Number: EP 21

Associated Equipment

Associated Emission Unit ID Number: EU 21
Emissions Control Equipment ID Number: CE 21
Emissions Control Equipment Description: Reverse Jet Dust Collector

Applicable Requirements

Emission Unit vented through this Emission Point: EU 21
Emission Unit Description: #4 Stucco Kettle
Raw Material/Fuel: Stucco
Rated Capacity: 20 tons/hr

Emission Limits (lb/hr, gr/dscf, lb/MMBtu, % opacity, etc.)
The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity
Emission Limit(s): 10 %
Authority for Requirement: Iowa DNR Construction Permit 96-A-148-S2
567 IAC 23.1(2)"ppp" (40 CFR 60.732(b))

Pollutant: PM_{10}
Emission Limit(s): 0.49 lb/hr
Authority for Requirement: Iowa DNR Construction Permit 96-A-148-S2

Pollutant: Particulate Matter
Emission Limit(s): 0.04 gr/dscf
Authority for Requirement: Iowa DNR Construction Permit 96-A-148-S2
567 IAC 23.1(2)"ppp" (40 CFR 60.732(a))

Pollutant: Sulfur Dioxide (SO_2)
Emission Limits: 500 ppmv
Authority for Requirement: 567 IAC 23.3(3)"e"

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Reporting & Record keeping:
Records shall be kept on-site for at least five (5) years and shall be available for inspection by the Department. Records shall be maintained in a legible and orderly manner and shall indicate the following:

A. The owner shall follow the specific startup and shutdown procedures provided by the dust collector vendor and shall maintain a record of periods of startup, shutdown or malfunction.
B. The owner shall perform routine monitoring and routine maintenance according to vendor's specifications. A log of actual inspections, observations, and maintenance shall be made available to the IDNR personnel upon request.
C. Dust collected in the filters shall be discharged only into closed containers without creating additional air emissions.

Authority for Requirement: Iowa DNR Construction Permit 96-A-148-S2

Emission Point Characteristics

This emission point shall conform to the specifications listed below.

Stack Height (ft, from the ground): 61.75
Stack Opening (inches, dia.): 24
Exhaust Temperature (^{o}F): 240
Exhaust Flowrate (scfm): 1,320
Vertical, Unobstructed Discharge Required: Yes ☒ No ☐
Authority for Requirement: Iowa DNR Construction Permit 96-A-148-S2

It shall be the owner's responsibility to ensure that construction conforms with the emission point characteristics stated above. If it is determined that any of the emission point characteristics are different than stated above, the owner must notify the Department and obtain a construction permit amendment, if required.

Periodic Monitoring Requirements

The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.

Opacity Monitoring

The facility shall check the opacity weekly during a period when the emission unit on this emission point is at or near full capacity and record the reading. Opacity shall be observed to ensure that no visible emissions occur during the material handling operation of the unit. If visible emissions are observed corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If corrective action does not return the observation to no visible emissions, then a Method 9 observation will be required. If an opacity greater than 10 % is observed, this would be a violation and corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake opacity readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits.

Weekly observations shall be conducted for a minimum of eight (8) consecutive weeks after permit issuance.

If no visible emissions are observed during this period then:

- Opacity observations shall be made once every other week for a duration of sixteen (16) weeks. If visible emissions are observed, monitoring reverts back to weekly.

If no visible emissions are observed during this period then:

- Observations shall be made once per month. If visible emissions are observed, monitoring reverts back to weekly.

If the source reverts back to weekly monitoring at any time, monitoring frequency will progress in an identical manner from the initial monitoring schedule.

Recordkeeping:

Maintain a written record of the observation and any action resulting from the observation. Records shall be maintained on-site for five (5) years and made available to representatives of the DNR upon request.

Stack Testing:

Pollutant - PM_{10}
Stack Test to be Completed by (date) - 2 years from permit issuance
Test Method - 201 A with 202, 40 CFR 51 (1)
Authority for Requirement - 567 IAC 22.108(3)

Pollutant - Particulate Matter
Stack Test to be Completed by (date) - 2 years from permit issuance
Test Method - Iowa Compliance Sampling Manual Method 5
Authority for Requirement - 567 IAC 22.108(3)

Pollutant – Sulfur Dioxide (SO_2)(2)
Stack Test to be Completed by (date) - 2 years from permit issuance
Test Method – 40 CFR 60, Appendix A, Method 6C
Authority for Requirement - 567 IAC 22.108(3)

Notes:
(1) Or approved alternative.
(2) The facility may choose to perform one SO_2 test on one of the five (5) Stucco Kettles (EP's 15, 17, 19, 21, & 23) to show compliance with the SO_2 emission limits for all five (5) kettles. If the one tested kettle exceeds the SO_2 emission limit, then all five (5) kettles will also be considered to be out of compliance with their respective SO_2 emission limits.

The owner of this equipment or the owner's authorized agent shall provide written notice to the Director, not less than 30 days before a required stack test or performance evaluation of a continuous emission monitor. Results of the test shall be submitted in writing to the Director in the form of a comprehensive report within 6 weeks of the completion of the testing. 567 IAC 25.1(7)

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☒ No ☐

Facility operation and maintenance plans must be sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the applicable requirements.

Facility operation and maintenance plans are to be developed by the facility within six(6) months of the issuance date of this permit and the data pertaining to the plan maintained on site for at least 5 years. The plan and associated recordkeeping provides documentation of this facility's implementation of its obligation to operate according to good air pollution control practice.

Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with this emission point.

Authority for Requirement: 567 IAC 22.108(3)"b"

Emission Point ID Number: EP 22

Associated Equipment

Associated Emission Unit ID Number: EU 22

Applicable Requirements

Emission Unit vented through this Emission Point: EU 22
Emission Unit Description: #4 Stucco Kettle (Combustion)
Raw Material/Fuel: Natural Gas
Rated Capacity: 3 burners, 5.30 MMBtu/hr each

Emission Limits (lb/hr, gr/dscf, lb/MMBtu, % opacity, etc.)
The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity
Emission Limits: 40 %[(1)]
Authority for Requirement: 567 IAC 23.3(2)"d" Iowa DNR Construction Permit 96-A-149-S3

[(1)] Per DNR Air Quality Policy 3-b-08, Opacity Limits, an exceedance of the indicator opacity of 10% will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. The permit holder shall also file an "indicator opacity exceedance report" with the DNR field office and keep records as required in the policy. If exceedances continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: PM_{10}
Emission Limit(s): 0.20 lb/hr[(2)]
Authority for Requirement: Iowa DNR Construction Permit 96-A-149S3

Pollutant: Particulate Matter
Emission Limit(s): 0.6 lb/MMBtu, 0.20 lb/hr[(2)]
Authority for Requirement: 567 IAC 23.3(2)"b" Iowa DNR Construction Permit 96-A-149-S3

Pollutant: Sulfur Dioxide (SO_2)
Emission Limit(s): 500 ppmv
Authority for Requirement: 567 IAC 23.3(3)"e" (Iowa DNR Construction Permit 96-A-149-S3

[(2)] Standard is expressed as the average of 3 runs.

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Process Throughput:
A. The emission units shall operate on natural gas only.
Authority for Requirement: Iowa DNR Construction Permit 96-A-149-S3

Emission Point Characteristics

The equipment shall be connected with a vertical, unobstructed discharging stack specified as follows.

Stack Height (feet): 50
Stack Diameter (inches): 20
Stack Exhaust Flow Rate (scfm): 1,700
Stack Temperature (^{o}F): 500
Vertical, Unobstructed Discharge Required: Yes ☒ No ☐
Authority for Requirement: Iowa DNR Construction Permit 96-A-149-S3

It shall be the owner's responsibility to ensure that construction conforms with the emission point characteristics stated above. If it is determined that any of the emission point characteristics are different than stated above, the owner must notify the Department and obtain a construction permit amendment, if required.

Periodic Monitoring Requirements

The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)"b"

Emission Point ID Number: EP 23

Associated Equipment

Associated Emission Unit ID Number: EU 23
Emissions Control Equipment ID Number: CE 23
Emissions Control Equipment Description: Baghouse

Applicable Requirements

Emission Unit vented through this Emission Point: EU 23
Emission Unit Description: #5 Stucco Kettle
Raw Material/Fuel: Stucco
Rated Capacity: 12 tons/hr

Emission Limits (lb/hr, gr/dscf, lb/MMBtu, % opacity, etc.)
The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity
Emission Limit(s): 40 %[(1)]
Authority for Requirement: 567 IAC 23.3(2)"d" Iowa DNR Construction Permit 02-A-676

[(1)] Per DNR Air Quality Policy 3-b-08, Opacity Limits, an exceedence of the indicator opacity of 10% will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedence. The permit holder shall also file an "indicator opacity exceedence report" with the DNR field office and keep records as required in the policy. If exceedences continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: PM_{10}
Emission Limit(s): 0.24 lb/hr[(2)]
Authority for Requirement: Iowa DNR Construction Permit 02-A-676

Pollutant: Particulate Matter
Emission Limit(s): 0.1 gr/scf, 0.24 lb/hr[(2)]
Authority for Requirement: 567 IAC 23.3(2)"a" Iowa DNR Construction Permit 02-A-676

Pollutant: Sulfur Dioxide (SO_2)
Emission Limit(s): 500 ppmv
Authority for Requirement: 567 IAC 23.3(3)"e"

[(2)] Standard is expressed as the average of 3 runs.

Emission Point Characteristics
The emission point shall conform to the specifications listed below.

Stack Height (feet): 50
Stack Diameter (inches): 18
Stack Exhaust Flow Rate (scfm): 2,800
Stack Temperature (^{o}F): 300
Vertical, Unobstructed Discharge Required: Yes ☒ No ☐
Authority for Requirement: Iowa DNR Construction Permit 02-A-676

It shall be the owner's responsibility to ensure that construction conforms with the emission point characteristics stated above. If it is determined that any of the emission point characteristics are different than stated above, the owner must notify the Department and obtain a construction permit amendment, if required.

Periodic Monitoring Requirements
The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.

Stack Testing:

Pollutant - PM_{10}[(1)]
Stack Test to be Completed by (date) - 2 years from permit issuance
Test Method - 201 A with 202, 40 CFR 51 [(2)]
Authority for Requirement - 567 IAC 22.108(3)

Pollutant - Particulate Matter[(1)]
Stack Test to be Completed by (date) - 2 years from permit issuance
Test Method - Iowa Compliance Sampling Manual Method 5
Authority for Requirement - 567 IAC 22.108(3)

Pollutant – Sulfur Dioxide (SO_2)[(3)]
Stack Test to be Completed by (date) - 2 years from permit issuance
Test Method – 40 CFR 60, Appendix A, Method 6C
Authority for Requirement - 567 IAC 22.108(3)

Notes:
(1) The facility may choose to perform one test on one of Stucco Kettle numbers 1, 2, 3, and 5 (EP's 15, 17, 19, & 23) to show compliance with the applicable emission limits for the four (4) kettles. If the one tested kettle exceeds the applicable emission limit, then all four (4) kettles will also be considered to be out of compliance with their respective emission limits.
(2) Or approved alternative.
(3) The facility may choose to perform one SO_2 test on one of the five (5) Stucco Kettles (EP's 15, 17, 19, 21, & 23) to show compliance with the SO_2 emission limits for all five (5) kettles. If the one tested kettle exceeds the SO_2 emission limit, then all five (5) kettles will also be considered to be out of compliance with their respective SO_2 emission limits.

The owner of this equipment or the owner's authorized agent shall provide written notice to the Director, not less than 30 days before a required stack test or performance evaluation of a continuous emission monitor. Results of the test shall be submitted in writing to the Director in the form of a comprehensive report within 6 weeks of the completion of the testing. 567 IAC 25.1(7)

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☒ No ☐

Facility operation and maintenance plans must be sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the applicable requirements.

Facility operation and maintenance plans are to be developed by the facility within six(6) months of the issuance date of this permit and the data pertaining to the plan maintained on site for at least 5 years. The plan and associated recordkeeping provides documentation of this facility's implementation of its obligation to operate according to good air pollution control practice.

Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with this emission point.

Authority for Requirement: 567 IAC 22.108(3)"b"

Emission Point ID Number: EP 24

Associated Equipment

Associated Emission Unit ID Number: EU 24

Applicable Requirements

Emission Unit vented through this Emission Point: EU 24
Emission Unit Description: #5 Stucco Kettle (Combustion)
Raw Material/Fuel: Natural Gas, Distillate Fuel Oil (backup)
Rated Capacity: 12.7 MMBtu/hr

Emission Limits (lb/hr, gr/dscf, lb/MMBtu, % opacity, etc.)
The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity
Emission Limit(s): 40 %[(1)]
Authority for Requirement: 567 IAC 23.3(2)"d" Iowa DNR Construction Permit 02-A-677

[(1)] Per DNR Air Quality Policy 3-b-08, Opacity Limits, an exceedence of the indicator opacity of 10% will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedence. The permit holder shall also file an "indicator opacity exceedence report" with the DNR field office and keep records as required in the policy. If exceedences continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: PM_{10}
Emission Limit(s): 0.20 lb/hr[(2)]
Authority for Requirement: Iowa DNR Construction Permit 02-A-677

Pollutant: Particulate Matter
Emission Limit(s): 0.6 lb/MMBtu, 0.20 lb/hr[(2)]
Authority for Requirement: 567 IAC 23.3(2)"b" Iowa DNR Construction Permit 02-A-677

Pollutant: Sulfur Dioxide (SO_2)
Emission Limit(s): 2.5 lb/MMBtu (limit when burning fuel oil)
Authority for Requirement: 567 IAC 23.3(3)"b"

Pollutant: Sulfur Dioxide
Emission Limit(s): 500 ppmv (limit when burning natural gas)
Authority for Requirement: 567 IAC 23.3(3)"e" Iowa DNR Construction Permit 02-A-677

[(2)] Standard is expressed as the average of 3 runs.

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Process throughput:

A. The emission unit shall operate on either natural gas or fuel oil.
B. The sulfur content of the fuel used shall not exceed 0.3% by weight.

Reporting & Record keeping:

The following records shall be maintained on-site for five (5) years and available for inspection upon request by representatives of the Department of Natural Resources:

A. The fuel used and the sulfur content of the fuel.

Authority for Requirement: Iowa DNR Construction Permit 02-A-677

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height (feet): 50
Stack Diameter (inches): 16
Stack Exhaust Flow Rate (scfm): 1,400
Stack Temperature (^{o}F): 300
Vertical, Unobstructed Discharge Required: Yes ☒ No ☐
Authority for Requirement: Iowa DNR Construction Permit 02-A-677

It shall be the owner's responsibility to ensure that construction conforms with the emission point characteristics stated above. If it is determined that any of the emission point characteristics are different than stated above, the owner must notify the Department and obtain a construction permit amendment, if required.

Periodic Monitoring Requirements

The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)"b"

Emission Point ID Number: EP 25

Associated Equipment

Associated Emission Unit ID Number: EU 25
Emissions Control Equipment ID Number: CE 25
Emissions Control Equipment Description: Baghouse

Applicable Requirements

Emission Unit vented through this Emission Point: EU 25
Emission Unit Description: Kettle Hot Pit
Raw Material/Fuel: Stucco
Rated Capacity: 45 tons/hr

Emission Limits (lb/hr, gr/dscf, lb/MMBtu, % opacity, etc.)
The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity
Emission Limit(s): 40 %[(1)]
Authority for Requirement: 567 IAC 23.3(2)"d" Iowa DNR Construction Permit 02-A-678

[(1)] Per DNR Air Quality Policy 3-b-08, Opacity Limits, an exceedence of the indicator opacity of 10% will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedence. The permit holder shall also file an "indicator opacity exceedence report" with the DNR field office and keep records as required in the policy. If exceedences continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: PM_{10}
Emission Limit(s): 0.28 lb/hr[(2)]
Authority for Requirement: Iowa DNR Construction Permit 02-A-678

Pollutant: Particulate Matter
Emission Limit(s): 0.1 gr/scf, 0.28 lb/hr[(2)]
Authority for Requirement: 567 IAC 23.3(2)"a" Iowa DNR Construction Permit 02-A-278

[(2)] Standard is expressed as the average of 3 runs.

Emission Point Characteristics
The emission point shall conform to the specifications listed below.

Stack Height (feet): 50
Stack Opening (inches): 12 x 13
Stack Exhaust Flow Rate (scfm): 2,800
Stack Temperature (^{o}F): 300
Horizontal Discharge Required: Yes ☒ No ☐
Authority for Requirement: Iowa DNR Construction Permit 02-A-678

It shall be the owner's responsibility to ensure that construction conforms with the emission point characteristics stated above. If it is determined that any of the emission point characteristics are different than stated above, the owner must notify the Department and obtain a construction permit amendment, if required.

Periodic Monitoring Requirements
The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.

Stack Testing:

Pollutant - PM_{10}
Stack Test to be Completed by (date) - 2 years from permit issuance
Test Method - 201 A with 202, 40 CFR 51 (1)
Authority for Requirement - 567 IAC 22.108(3)

Pollutant - Particulate Matter
Stack Test to be Completed by (date) - 2 years from permit issuance
Test Method - Iowa Compliance Sampling Manual Method 5
Authority for Requirement - 567 IAC 22.108(3)

Notes:
(1) Or approved alternative.

The owner of this equipment or the owner's authorized agent shall provide written notice to the Director, not less than 30 days before a required stack test or performance evaluation of a continuous emission monitor. Results of the test shall be submitted in writing to the Director in the form of a comprehensive report within 6 weeks of the completion of the testing. 567 IAC 25.1(7)

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☒ No ☐

Facility operation and maintenance plans must be sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the applicable requirements.

Facility operation and maintenance plans are to be developed by the facility within six(6) months of the issuance date of this permit and the data pertaining to the plan maintained on site for at least 5 years. The plan and associated recordkeeping provides documentation of this facility's implementation of its obligation to operate according to good air pollution control practice.

Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with this emission point.

Authority for Requirement: 567 IAC 22.108(3)"b"

Emission Point ID Number: EP 26

Associated Equipment

Associated Emission Unit ID Number: EU 26
Emissions Control Equipment ID Number: CE 26
Emissions Control Equipment Description: Baghouse (vents inside building)

Applicable Requirements

Emission Unit vented through this Emission Point: EU 26
Emission Unit Description: Kettle Feed Storage Bin for #1, #3, #3
Raw Material/Fuel: Landplaster
Rated Capacity: 36 tons/hr

Emission Limits (lb/hr, gr/dscf, lb/MMBtu, % opacity, etc.)
The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Fugitive Dust
Emission Limit: No person shall allow, cause or permit any materials to be handled, transported or stored; or a building, its appurtenances or a construction haul road to be used, constructed, altered, repaired or demolished, without taking reasonable precautions to prevent a nuisance. All persons shall take reasonable precautions to prevent the discharge of visible emissions of fugitive dusts beyond the lot line of the property on which the emissions originate.

Authority for Requirement: 567 IAC 23.3(2)"c"

Periodic Monitoring Requirements
The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)"b"

Emission Point ID Number: EP 27

Associated Equipment

Associated Emission Unit ID Number: EU 27
Emissions Control Equipment ID Number: CE 27
Emissions Control Equipment Description: Baghouse

Applicable Requirements

Emission Unit vented through this Emission Point: EU 27
Emission Unit Description: Mill Tube Mill
Raw Material/Fuel: Stucco
Rated Capacity: 35 tons/hr

Emission Limits (lb/hr, gr/dscf, lb/MMBtu, % opacity, etc.)
The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity
Emission Limit(s): 40% (1)
Authority for Requirement: 567 IAC 23.3(2)"d" Iowa DNR Construction Permit 99-A-643-S1

(1) Per DNR Air Quality Policy 3-b-08, Opacity Limits, an exceedance of the indicator opacity of 10% will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. The permit holder shall also file an "indicator opacity exceedance report" with the DNR field office and keep records as required in the policy. If exceedances continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: PM_{10}
Emission Limit(s): 0.28 lb/hr(2)
Authority for Requirement: Iowa DNR Construction Permit 99-A-643-S1

Pollutant: Particulate Matter
Emission Limit(s): 0.1 gr/scf, 0.28 lb/hr(2)
Authority for Requirement: 567 IAC 23.3(2)"a" Iowa DNR Construction Permit 99-A-643-S1

(2) Standard is expressed as the average of 3 runs.

Emission Point Characteristics
The source shall be connected to the stack designated below.

Stack Height (feet): 55
Stack Diameter (inches): 6
Stack Exhaust Flow Rate (scfm): 1,100
Stack Temperature (^{o}F): 250
Vertical, Unobstructed Discharge Required: Yes ☒ No ☐
Authority for Requirement: Iowa DNR Construction Permit 99-A-643-S1

It shall be the owner's responsibility to ensure that construction conforms with the emission point characteristics stated above. If it is determined that any of the emission point characteristics are different than stated above, the owner must notify the Department and obtain a construction permit amendment, if required.

Periodic Monitoring Requirements
The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.

Stack Testing:

Pollutant - Particulate Matter
Stack Test to be Completed by (date) - 2 years from permit issuance
Test Method - Iowa Compliance Sampling Manual Method 5
Authority for Requirement - 567 IAC 22.108(3)

Pollutant - Particulate Matter
Stack Test to be Completed by (date) - 2 years from permit issuance
Test Method - Iowa Compliance Sampling Manual Method 5
Authority for Requirement - 567 IAC 22.108(3)

Notes:
(1) Or approved alternative.

The owner of this equipment or the owner's authorized agent shall provide written notice to the Director, not less than 30 days before a required stack test or performance evaluation of a continuous emission monitor. Results of the test shall be submitted in writing to the Director in the form of a comprehensive report within 6 weeks of the completion of the testing. 567 IAC 25.1(7)

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☒ No ☐

Facility operation and maintenance plans must be sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the applicable requirements.

Facility operation and maintenance plans are to be developed by the facility within six(6) months of the issuance date of this permit and the data pertaining to the plan maintained on site for at least 5 years. The plan and associated recordkeeping provides documentation of this facility's implementation of its obligation to operate according to good air pollution control practice.

Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with this emission point.

Authority for Requirement: 567 IAC 22.108(3)"b"

Emission Point ID Number: EP 28 (Vents Inside)

Associated Equipment

Associated Emission Unit ID Number: EU 28

Applicable Requirements

Emission Unit vented through this Emission Point: EU 28
Emission Unit Description: #6 Kettle Feed Bin
Raw Material/Fuel: Landplaster
Rated Capacity: 8 tons/hr

Emission Limits (lb/hr, gr/dscf, lb/MMBtu, % opacity, etc.)
The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Fugitive Dust
Emission Limit: No person shall allow, cause or permit any materials to be handled, transported or stored; or a building, its appurtenances or a construction haul road to be used, constructed, altered, repaired or demolished, without taking reasonable precautions to prevent a nuisance. All persons shall take reasonable precautions to prevent the discharge of visible emissions of fugitive dusts beyond the lot line of the property on which the emissions originate.

Authority for Requirement: 567 IAC 23.3(2)"c"

Periodic Monitoring Requirements
The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)"b"

Emission Point ID Number: EP 30

Associated Equipment

Associated Emission Unit ID Number: EU 30

Applicable Requirements

Emission Unit vented through this Emission Point: EU 30
Emission Unit Description: Hydrocal Bulk Boiler
Raw Material/Fuel: Natural Gas, Distillate Fuel Oil (backup)
Rated Capacity: 16.8 MMBtu/hr

Emission Limits (lb/hr, gr/dscf, lb/MMBtu, % opacity, etc.)
The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity
Emission Limit(s): 40 %[(1)]
Authority for Requirement: 567 IAC 23.3(2)"d" Iowa DNR Construction Permit 02-A-680

[(1)] Per DNR Air Quality Policy 3-b-08, Opacity Limits, an exceedence of the indicator opacity of 10% will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedence. The permit holder shall also file an "indicator opacity exceedence report" with the DNR field office and keep records as required in the policy. If exceedences continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: PM_{10}
Emission Limit(s): 0.27 lb/hr[(2)]
Authority for Requirement: Iowa DNR Construction Permit 02-A-680

Pollutant: Particulate Matter
Emission Limit(s): 0.6 lb/MMBtu, 0.27 lb/hr[(2)]
Authority for Requirement: 567 IAC 23.3(2)"b" Iowa DNR Construction Permit 02-A-680

Pollutant: Sulfur Dioxide (SO_2)
Emission Limit(s): 2.5 lb/MMBtu (limit when burning fuel oil)
Authority for Requirement: 567 IAC 23.3(3)"b"

Pollutant: Sulfur Dioxide
Emission Limit(s): 500 ppmv (limit when burning natural gas)
Authority for Requirement: 567 IAC 23.3(3)"e" Iowa DNR Construction Permit 02-A-680

[(2)] Standard is expressed as the average of 3 runs.

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Process throughput:

A. The emission unit shall operate on either natural gas or fuel oil.
B. The sulfur content of the fuel used shall not exceed 0.3% by weight.

Reporting & Record keeping:

The following records shall be maintained on-site for five (5) years and available for inspection upon request by representatives of the Department of Natural Resources:

A. The fuel used and the sulfur content of the fuel.

Authority for Requirement: Iowa DNR Construction Permit 02-A-680

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height (feet): 55
Stack Diameter (inches): 20
Stack Exhaust Flow Rate (scfm): 200
Stack Temperature (^{o}F): 370
Vertical, Obstructed Discharge Required: Yes ☒ No ☐
Authority for Requirement: Iowa DNR Construction Permit 02-A-680

It shall be the owner's responsibility to ensure that construction conforms with the emission point characteristics stated above. If it is determined that any of the emission point characteristics are different than stated above, the owner must notify the Department and obtain a construction permit amendment, if required.

Periodic Monitoring Requirements

The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)"b"

Emission Point ID Number: EP 32

Associated Equipment

Associated Emission Unit ID Numbers: EU 31, EU 32
Emissions Control Equipment ID Number: CE 31
Emissions Control Equipment Description: Bag Filter #1

Applicable Requirements

Emission Unit vented through this Emission Point: EU 31
Emission Unit Description: Hydrocal Bulk Impact Mill
Raw Material/Fuel: Calcined Gypsum
Rated Capacity: 10 tons/hr

Emission Unit vented through this Emission Point: EU 32
Emission Unit Description: Hydrocal Bulk Impact Mill (Combustion)
Raw Material/Fuel: Natural Gas
Rated Capacity: 4.26 MMBtu/hr

Emission Limits (lb/hr, gr/dscf, lb/MMBtu, % opacity, etc.)
The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity
Emission Limit(s): 40% (1)
Authority for Requirement: 567 IAC 23.3(2)"d" Iowa DNR Construction Permit 75-A-157-S2

(1) Per DNR Air Quality Policy 3-b-08, Opacity Limits, an exceedence of the indicator opacity of 10% will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedence. The permit holder shall also file an "indicator opacity exceedence report" with the DNR field office and keep records as required in the policy. If exceedences continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: PM_{10}
Emission Limit(s): 1.26 lb/hr
Authority for Requirement: Iowa DNR Construction Permit 75-A-157-S2

Pollutant: Particulate Matter
Emission Limit(s): 0.1 gr/dscf
Authority for Requirement: 567 IAC 23.3(2)"a" Iowa DNR Construction Permit 75-A-157-S2

Pollutant: Sulfur Dioxide (SO_2)
Emission Limit(s): 500 ppmv
Authority for Requirement: 567 IAC 23.3(3)"e"

Emission Point Characteristics
This emission point shall conform to the specifications listed below.

Stack Height (ft, from the ground): 55
Stack Opening, (inches, dia.): 14
Exhaust Temperature (^oF): 350
Exhaust Flowrate (scfm): 4,580
Vertical, Unobstructed Discharge Required: Yes ☒ No ☐
Authority for Requirement: Iowa DNR Construction permit 75-A-157-S2

It shall be the owner's responsibility to ensure that construction conforms with the emission point characteristics stated above. If it is determined that any of the emission point characteristics are different than stated above, the owner must notify the Department and obtain a construction permit amendment, if required.

Periodic Monitoring Requirements
The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.

Stack Testing:

Pollutant - PM_{10}
Stack Test to be Completed by (date) - 2 years from permit issuance
Test Method - 40 CFR 51, Appendix M, 201A with 202 (1)
Authority for Requirement - 567 IAC 22.108(3)

Pollutant - Particulate Matter
Stack Test to be Completed by (date) - 2 years from permit issuance
Test Method - Iowa Compliance Sampling Manual Method 5
Authority for Requirement - 567 IAC 22.108(3)

Notes:
(1) Or approved alternative.

The owner of this equipment or the owner's authorized agent shall provide written notice to the Director, not less than 30 days before a required stack test or performance evaluation of a continuous emission monitor. Results of the test shall be submitted in writing to the Director in the form of a comprehensive report within 6 weeks of the completion of the testing. 567 IAC 25.1(7)

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☒ No ☐

Facility operation and maintenance plans must be sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the applicable requirements.

Facility operation and maintenance plans are to be developed by the facility within six(6) months of the issuance date of this permit and the data pertaining to the plan maintained on site for at least 5 years. The plan and associated recordkeeping provides documentation of this facility's implementation of its obligation to operate according to good air pollution control practice.

Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with this emission point.

Authority for Requirement: 567 IAC 22.108(3)"b"

Emission Point ID Number: EP 33

Associated Equipment

Associated Emission Unit ID Number: EU 33
Emissions Control Equipment ID Number: CE 33
Emissions Control Equipment Description: Bag Filter #3

Applicable Requirements

Emission Unit vented through this Emission Point: EU 33
Emission Unit Description: Hydrocal Rock Bin
Raw Material/Fuel: Gypsum Rock
Rated Capacity: 20 tons/hr

Emission Limits (lb/hr, gr/dscf, lb/MMBtu, % opacity, etc.)
The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity
Emission Limit(s): 40% (1)
Authority for Requirement: 567 IAC 23.3(2)"d" Iowa DNR Construction Permit 75-A-159-S2

(1) Per DNR Air Quality Policy 3-b-08, Opacity Limits, an exceedence of the indicator opacity of 10% will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedence. The permit holder shall also file an "indicator opacity exceedence report" with the DNR field office and keep records as required in the policy. If exceedences continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: PM_{10}
Emission Limit(s): 0.343 lb/hr
Authority for Requirement: Iowa DNR Construction Permit 75-A-159-S2

Pollutant: Particulate Matter
Emission Limit(s): 0.1 gr/dscf
Authority for Requirement: 567 IAC 23.3(2)"a" Iowa DNR Construction Permit 75-A-159-S2

Emission Point Characteristics
This emission point shall conform to the specifications listed below.

Stack Height (ft, from the ground): 55
Stack Opening (inches, dia.): 10
Exhaust Temperature (^{o}F): Ambient
Exhaust Flowrate (scfm): 2,000
Vertical, Unobstructed Discharge Required: Yes ☒ No ☐
Authority for Requirement: Iowa DNR Construction Permit 75-A-159-S2

It shall be the owner's responsibility to ensure that construction conforms with the emission point characteristics stated above. If it is determined that any of the emission point characteristics are different than stated above, the owner must notify the Department and obtain a construction permit amendment, if required.

Periodic Monitoring Requirements
The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.

Stack Testing:

Pollutant - PM_{10}
Stack Test to be Completed by (date) - 2 years from permit issuance
Test Method - 40 CFR 51, Appendix M, 201A with 202 (1)
Authority for Requirement - 567 IAC 22.108(3)

Pollutant - Particulate Matter
Stack Test to be Completed by (date) - 2 years from permit issuance
Test Method - Iowa Compliance Sampling Manual Method 5
Authority for Requirement - 567 IAC 22.108(3)

Notes:
(1) Or approved alternative.

The owner of this equipment or the owner's authorized agent shall provide written notice to the Director, not less than 30 days before a required stack test or performance evaluation of a continuous emission monitor. Results of the test shall be submitted in writing to the Director in the form of a comprehensive report within 6 weeks of the completion of the testing. 567 IAC 25.1(7)

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☒ No ☐

Facility operation and maintenance plans must be sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the applicable requirements.

Facility operation and maintenance plans are to be developed by the facility within six(6) months of the issuance date of this permit and the data pertaining to the plan maintained on site for at least 5 years. The plan and associated recordkeeping provides documentation of this facility's implementation of its obligation to operate according to good air pollution control practice.

Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with this emission point.

Authority for Requirement: 567 IAC 22.108(3)"b"

Emission Point ID Number: EP 34

Associated Equipment

Associated Emission Unit ID Number: EU 34
Emissions Control Equipment ID Number: CE 34
Emissions Control Equipment Description: Baghouse

Applicable Requirements

Emission Unit vented through this Emission Point: EU 34
Emission Unit Description: Hydrocal Bulk Finish Grind
Raw Material/Fuel: Gypsum Rock
Rated Capacity: 10 tons/hr

Emission Limits (lb/hr, gr/dscf, lb/MMBtu, % opacity, etc.)
The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity
Emission Limit(s): 40% (1)
Authority for Requirement: 567 IAC 23.3(2)"d" Iowa DNR Construction Permit 75-A-158-S3

(1) Per DNR Air Quality Policy 3-b-08, Opacity Limits, an exceedence of the indicator opacity of 10% will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedence. The permit holder shall also file an "indicator opacity exceedence report" with the DNR field office and keep records as required in the policy. If exceedences continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: PM_{10}
Emission Limit(s): 0.34 lb/hr(2)
Authority for Requirement: Iowa DNR Construction Permit 75-A-158-S3

Pollutant: Particulate Matter
Emission Limit(s): 0.1 gr/dscf, 0.34 lb/hr(2)
Authority for Requirement: 567 IAC 23.3(2)"a" Iowa DNR Construction Permit 75-A-158-S3

(2) Standard is expressed as the average of 3 runs.

Emission Point Characteristics
This emission point shall conform to the specifications listed below.

Stack Height (ft, from the ground): 55
Stack Opening (inches, dia.): 10
Exhaust Temperature (^{o}F): 280
Exhaust Flowrate (scfm): 1,400
Vertical, Unobstructed Discharge Required: Yes ☒ No ☐
Authority for Requirement: Iowa DNR Construction Permit 75-A-158-S3

It shall be the owner's responsibility to ensure that construction conforms with the emission point characteristics stated above. If it is determined that any of the emission point characteristics are different than stated above, the owner must notify the Department and obtain a construction permit amendment, if required.

Periodic Monitoring Requirements
The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.

Stack Testing:

Pollutant - PM_{10}
Stack Test to be Completed by (date) - 2 years from permit issuance
Test Method - 40 CFR 51, Appendix M, 201A with 202 (1)
Authority for Requirement - 567 IAC 22.108(3)

Pollutant - Particulate Matter
Stack Test to be Completed by (date) - 2 years from permit issuance
Test Method - Iowa Compliance Sampling Manual Method 5
Authority for Requirement - 567 IAC 22.108(3)

Notes:
(1) Or approved alternative.

The owner of this equipment or the owner's authorized agent shall provide written notice to the Director, not less than 30 days before a required stack test or performance evaluation of a continuous emission monitor. Results of the test shall be submitted in writing to the Director in the form of a comprehensive report within 6 weeks of the completion of the testing. 567 IAC 25.1(7)

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☒ No ☐

Facility operation and maintenance plans must be sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the applicable requirements.

Facility operation and maintenance plans are to be developed by the facility within six(6) months of the issuance date of this permit and the data pertaining to the plan maintained on site for at least 5 years. The plan and associated recordkeeping provides documentation of this facility's implementation of its obligation to operate according to good air pollution control practice.

Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with this emission point.

Authority for Requirement: 567 IAC 22.108(3)"b"

Emission Point ID Number: EP 36

Associated Equipment

Associated Emission Unit ID Number: EU 36

Applicable Requirements

Emission Unit vented through this Emission Point: EU 36
Emission Unit Description: Hydrocal Bulk Tube Mill (Combustion)
Raw Material/Fuel: Natural Gas
Rated Capacity: 3.7 MMBtu/hr

Emission Limits (lb/hr, gr/dscf, lb/MMBtu, % opacity, etc.)
The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity
Emission Limit(s): 40 %[(1)]
Authority for Requirement: 567 IAC 23.3(2)"d" Iowa DNR Construction Permit 02-A-681

[(1)] Per DNR Air Quality Policy 3-b-08, Opacity Limits, an exceedence of the indicator opacity of "no visible emissions" will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedence. The permit holder shall also file an "indicator opacity exceedence report" with the DNR field office and keep records as required in the policy. If exceedences continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: PM_{10}
Emission Limit(s): 0.04 lb/hr[(2)]
Authority for Requirement: Iowa DNR Construction Permit 02-A-681

Pollutant: Particulate Matter
Emission Limit(s): 0.6 lb/MMBtu, 0.04 lb/hr[(2)]
Authority for Requirement: 567 IAC 23.3(2)"b" Iowa DNR Construction Permit 02-A-681

Pollutant: Sulfur Dioxide
Emission Limit(s): 500 ppmv
Authority for Requirement: 567 IAC 23.3(3)"e" Iowa DNR Construction Permit 02-A-681

[(2)] Standard is expressed as the average of 3 runs.

Operational Limits & Requirements
The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Process throughput:
A. This emission unit shall operate on natural gas only.

Authority for Requirement: Iowa DNR Construction Permit 02-A-681

Emission Point Characteristics
The emission point shall conform to the specifications listed below.

Stack Height (feet): 55
Stack Diameter (inches): 10
Stack Exhaust Flow Rate (scfm): 500
Stack Temperature (^{o}F): 300
Vertical, Obstructed Discharge Required: Yes ☒ No ☐
Authority for Requirement: Iowa DNR Construction Permit 02-A-681

It shall be the owner's responsibility to ensure that construction conforms with the emission point characteristics stated above. If it is determined that any of the emission point characteristics are different than stated above, the owner must notify the Department and obtain a construction permit amendment, if required.

Periodic Monitoring Requirements
The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)"b"

Emission Point ID Number: EP 41

Associated Equipment

Associated Emission Unit ID Number: EU 41
Emissions Control Equipment ID Number: CE 41
Emissions Control Equipment Description: Baghouse

Applicable Requirements

Emission Unit vented through this Emission Point: EU 41
Emission Unit Description: Hydrocal Finish 1A & 1B Base Storage Bin
Raw Material/Fuel: Calcined Gypsum
Rated Capacity: 10 tons/hr

Emission Limits (lb/hr, gr/dscf, lb/MMBtu, % opacity, etc.)
The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity
Emission Limit(s): 40% (1)
Authority for Requirement: 567 IAC 23.3(2)"d" Iowa DNR Construction Permit 75-A-161-S2

(1) Per DNR Air Quality Policy 3-b-08, Opacity Limits, an exceedence of the indicator opacity of 25% will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedence. The permit holder shall also file an "indicator opacity exceedence report" with the DNR field office and keep records as required in the policy. If exceedences continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: PM_{10}
Emission Limit(s): 0.218 lb/hr
Authority for Requirement: Iowa DNR Construction Permit 75-A-161-S2

Pollutant: Particulate Matter
Emission Limit(s): 0.1 gr/dscf
Authority for Requirement: 567 IAC 23.3(2)"a" Iowa DNR Construction Permit 75-A-161-S2

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Process throughput:

A. The throughput of this emission unit shall not exceed 87,600 tons per 12-month rolling period.

Reporting & Record keeping:

Records shall be kept on-site for at least 5 years and shall be available for inspection by the Department. Records shall be maintained in a legible and orderly manner and shall indicate the following:

A. The amount of material processed in this unit, in tons. Calculate and record monthly and 12-month totals rolled monthly.

Authority for Requirement: Iowa DNR Construction Permit 75-A-161-S2

Emission Point Characteristics

The source shall be connected to the stack designated below.

Stack Height (feet): 70
Stack Diameter (inches): 12
Stack Exhaust Flow Rate (acfm): 2,200
Stack Temperature (^{o}F): Ambient
Vertical, Unobstructed Discharge Required: Yes ☒ No ☐
Authority for Requirement: Iowa DNR Construction Permit 75-A-161-S2

It shall be the owner's responsibility to ensure that construction conforms with the emission point characteristics stated above. If it is determined that any of the emission point characteristics are different than stated above, the owner must notify the Department and obtain a construction permit amendment, if required.

Periodic Monitoring Requirements

The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.

Stack Testing:

Pollutant - PM_{10}
Stack Test Completed on March 21, 2000
Result Concentration – 0.003 gr/dscf
Result Emission Rate – 0.04 lb/hr
Test Method - 40 CFR 51, Appendix M, 201A with 202
Authority for Requirement - Iowa DNR Construction Permit 75-A-161-S2

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☒ No ☐

Facility operation and maintenance plans must be sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the applicable requirements.

Facility operation and maintenance plans are to be developed by the facility within six(6) months of the issuance date of this permit and the data pertaining to the plan maintained on site for at least 5 years. The plan and associated recordkeeping provides documentation of this facility's implementation of its obligation to operate according to good air pollution control practice.

Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with this emission point.

Authority for Requirement: 567 IAC 22.108(3)"b"

Emission Point ID Number: EP 42

Associated Equipment

Associated Emission Unit ID Number: EU 42
Emissions Control Equipment ID Number: CE 42
Emissions Control Equipment Description: Baghouse

Applicable Requirements

Emission Unit vented through this Emission Point: EU 42
Emission Unit Description: Hydrocal Finish 2A & 2B Base Storage Bin
Raw Material/Fuel: Calcined Gypsum
Rated Capacity: 10 tons/hr

Emission Limits (lb/hr, gr/dscf, lb/MMBtu, % opacity, etc.)
The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity
Emission Limit(s): 40% (1)
Authority for Requirement: 567 IAC 23.3(2)"d" Iowa DNR Construction Permit 75-A-162-S2

(1) Per DNR Air Quality Policy 3-b-08, Opacity Limits, an exceedence of the indicator opacity of 25% will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedence. The permit holder shall also file an "indicator opacity exceedence report" with the DNR field office and keep records as required in the policy. If exceedences continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: PM_{10}
Emission Limit(s): 0.218 lb/hr
Authority for Requirement: Iowa DNR Construction Permit 75-A-162-S2

Pollutant: Particulate Matter
Emission Limit(s): 0.1 gr/dscf
Authority for Requirement: 567 IAC 23.3(2)"a" Iowa DNR Construction Permit 75-A-162-S2

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Process throughput:

A. The throughput of this emission unit shall not exceed 87,600 tons per 12-month rolling period.

Records shall be kept on-site for at least 5 years and shall be available for inspection by the Department. Records shall be maintained in a legible and orderly manner and shall indicate the following:

A. The amount of material processed in this unit, in tons. Calculate and record monthly and 12-month totals rolled monthly.

Authority for Requirement: Iowa DNR Construction Permit 75-A-162-S2

Emission Point Characteristics

The source shall be connected to the stack designated below.

Stack Height (feet): 70
Stack Diameter (inches): 12
Stack Exhaust Flow Rate (acfm): 2,200
Stack Temperature (^{o}F): Ambient
Vertical, Unobstructed Discharge Required: Yes ☒ No ☐
Authority for Requirement: Iowa DNR Construction Permit 75-A-162-S2

It shall be the owner's responsibility to ensure that construction conforms with the emission point characteristics stated above. If it is determined that any of the emission point characteristics are different than stated above, the owner must notify the Department and obtain a construction permit amendment, if required.

Periodic Monitoring Requirements

The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.

Stack Testing:

Pollutant - PM_{10}
Test To be Completed by – within two (2) years from permit issuance.
Test Method - 40 CFR 51, Appendix M, 201A with 202
Authority for Requirement - Iowa DNR Construction Permit 75-A-162-S2 (1)

Notes:
(1) The stack testing requirement for EP 42 was fulfilled by completing the stack testing requirement for EP 41 (see page 85 for test results).

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☒ No ☐

Facility operation and maintenance plans must be sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the applicable requirements.

Facility operation and maintenance plans are to be developed by the facility within six(6) months of the issuance date of this permit and the data pertaining to the plan maintained on site for at least 5 years. The plan and associated recordkeeping provides documentation of this facility's implementation of its obligation to operate according to good air pollution control practice.

Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with this emission point.

Authority for Requirement: 567 IAC 22.108(3)"b"

Emission Point ID Number: EP 43

Associated Equipment

Associated Emission Unit ID Number: EU 43
Emissions Control Equipment ID Number: CE 43
Emissions Control Equipment Description: Baghouse

Applicable Requirements

Emission Unit vented through this Emission Point: EU 43
Emission Unit Description: Hydrocal Finish #1 Base Supply Bin
Raw Material/Fuel: Calcined Gypsum
Rated Capacity: 40 tons/hr

Emission Limits (lb/hr, gr/dscf, lb/MMBtu, % opacity, etc.)
The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity
Emission Limit(s): 40% (1)
Authority for Requirement: 567 IAC 23.3(2)"d" Iowa DNR Construction Permit 75-A-165-S3

(1) Per DNR Air Quality Policy 3-b-08, Opacity Limits, an exceedence of the indicator opacity of 10% will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedence. The permit holder shall also file an "indicator opacity exceedence report" with the DNR field office and keep records as required in the policy. If exceedences continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: PM_{10}
Emission Limit(s): 0.44 lb/hr(2)
Authority for Requirement: Iowa DNR Construction Permit 75-A-165-S3

Pollutant: Particulate Matter
Emission Limit(s): 0.1 gr/dscf, 0.44 lb/hr(2)
Authority for Requirement: 567 IAC 23.3(2)"a" Iowa DNR Construction Permit 75-A-165-S3

(2) Standard is expressed as the average of 3 runs.

Emission Point Characteristics
The source shall be connected to the stack designated below.

Stack Height (feet): 80
Stack Diameter (inches): 12
Stack Exhaust Flow Rate (scfm): 2,200
Stack Temperature (^{o}F): 70
Vertical, Unobstructed Discharge Required: Yes ☒ No ☐
Authority for Requirement: Iowa DNR Construction Permit 75-A-165-S3

It shall be the owner's responsibility to ensure that construction conforms with the emission point characteristics stated above. If it is determined that any of the emission point characteristics are different than stated above, the owner must notify the Department and obtain a construction permit amendment, if required.

Periodic Monitoring Requirements
The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.

Stack Testing Completed:

Pollutant - PM_{10}
Stack Test Completed – May 2, 2000
Result Concentration – 0.005 gr/dscf
Result Emission Rate – 0.07 lb/hr
Test Method - 40 CFR 51, Appendix M, 201A with 202 (1)
Authority for Requirement - 567 IAC 22.108(3)

Notes:
(1) Or approved alternative.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☒ No ☐

Facility operation and maintenance plans must be sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the applicable requirements.

Facility operation and maintenance plans are to be developed by the facility within six(6) months of the issuance date of this permit and the data pertaining to the plan maintained on site for at least 5 years. The plan and associated recordkeeping provides documentation of this facility's implementation of its obligation to operate according to good air pollution control practice.

Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with this emission point.

Authority for Requirement: 567 IAC 22.108(3)"b"

Emission Point ID Number: EP 44

Associated Equipment

Associated Emission Unit ID Number: EU 44
Emissions Control Equipment ID Number: CE 44
Emissions Control Equipment Description: Baghouse

Applicable Requirements

Emission Unit vented through this Emission Point: EU 44
Emission Unit Description: Hydrocal Finish #2 Base Supply Bin
Raw Material/Fuel: Calcined Gypsum
Rated Capacity: 40 tons/hr

Emission Limits (lb/hr, gr/dscf, lb/MMBtu, % opacity, etc.)
The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity
Emission Limit(s): 40% (1)
Authority for Requirement: 567 IAC 23.3(2)"d" Iowa DNR Construction Permit 75-A-166-S3

(1) Per DNR Air Quality Policy 3-b-08, Opacity Limits, an exceedence of the indicator opacity of 10% will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedence. The permit holder shall also file an "indicator opacity exceedence report" with the DNR field office and keep records as required in the policy. If exceedences continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: PM_{10}
Emission Limit(s): 0.44 lb/hr(2)
Authority for Requirement: Iowa DNR Construction Permit 75-A-166-S3

Pollutant: Particulate Matter
Emission Limit(s): 0.1 gr/dscf, 0.44 lb/hr(2)
Authority for Requirement: 567 IAC 23.3(2)"a" Iowa DNR Construction Permit 75-A-166-S3

(2) Standard is expressed as the average of 3 runs.

Emission Point Characteristics
The source shall be connected to the stack designated below.

Stack Height (feet): 80
Stack Diameter (inches): 12
Stack Exhaust Flow Rate (scfm): 2,200
Stack Temperature (^{o}F): 70
Vertical, Unobstructed Discharge Required: Yes ☒ No ☐
Authority for Requirement: Iowa DNR Construction Permit 75-A-166-S3

It shall be the owner's responsibility to ensure that construction conforms with the emission point characteristics stated above. If it is determined that any of the emission point characteristics are different than stated above, the owner must notify the Department and obtain a construction permit amendment, if required.

Periodic Monitoring Requirements
The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.

Stack Testing:

Pollutant - PM_{10}
Test to be Completed by – within two (2) years from permit issuance
Test Method - 40 CFR 51, Appendix M, 201A with 202 (1)
Authority for Requirement – Iowa DNR Construction Permit 75-A-166-S3(1)

Notes:
(1) The stack testing requirement for EP 44 was fulfilled by completing the stack testing requirement for EP 43 (see page 91 for test results).

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☒ No ☐

Facility operation and maintenance plans must be sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the applicable requirements.

Facility operation and maintenance plans are to be developed by the facility within six(6) months of the issuance date of this permit and the data pertaining to the plan maintained on site for at least 5 years. The plan and associated recordkeeping provides documentation of this facility's implementation of its obligation to operate according to good air pollution control practice.

Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with this emission point.

Authority for Requirement: 567 IAC 22.108(3)"b"

Emission Point ID Number: EP 45

Associated Equipment

Associated Emission Unit ID Number: EU 45
Emissions Control Equipment ID Number: CE 45
Emissions Control Equipment Description: Baghouse

Applicable Requirements

Emission Unit vented through this Emission Point: EU 45
Emission Unit Description: Hydrocal Finish #3A Carbonate Supply Bin
Raw Material/Fuel: Calcium Carbonate
Rated Capacity: 22 tons/hr

Emission Limits (lb/hr, gr/dscf, lb/MMBtu, % opacity, etc.)
The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity
Emission Limit(s): 40% (1)
Authority for Requirement: 567 IAC 23.3(2)"d" Iowa DNR Construction Permit 75-A-163-S3

(1) Per DNR Air Quality Policy 3-b-08, Opacity Limits, an exceedence of the indicator opacity of 25% will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedence. The permit holder shall also file an "indicator opacity exceedence report" with the DNR field office and keep records as required in the policy. If exceedences continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: PM_{10}
Emission Limit(s): 0.40 lb/hr(2)
Authority for Requirement: Iowa DNR Construction Permit 75-A-163-S3

Pollutant: Particulate Matter
Emission Limit(s): 0.1 gr/dscf, 0.40 lb/hr(2)
Authority for Requirement: 567 IAC 23.3(2)"a" Iowa DNR Construction Permit 75-A-163-S3

(2) Standard is expressed as the average of 3 runs.

Emission Point Characteristics
The source shall be connected to the stack designated below.

Stack Height (feet): 70
Stack Diameter (inches): 12
Stack Exhaust Flow Rate (scfm): 2,200
Stack Temperature (^{o}F): 70
Vertical, Unobstructed Discharge Required: Yes ☒ No ☐
Authority for Requirement: Iowa DNR Construction Permit 75-A-163-S3

It shall be the owner's responsibility to ensure that construction conforms with the emission point characteristics stated above. If it is determined that any of the emission point characteristics are different than stated above, the owner must notify the Department and obtain a construction permit amendment, if required.

Periodic Monitoring Requirements
The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.

Stack Testing Completed:

Pollutant - PM_{10}
Stack Test Completed – March 20-22, 2000
Result Concentration – 0.006 gr/dscf
Result Emission Rate – 0.05 lb/hr
Test Method - 40 CFR 51, Appendix M, 201A with 202
Authority for Requirement - 567 IAC 22.108(3)

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☒ No ☐

Facility operation and maintenance plans must be sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the applicable requirements.

Facility operation and maintenance plans are to be developed by the facility within six(6) months of the issuance date of this permit and the data pertaining to the plan maintained on site for at least 5 years. The plan and associated recordkeeping provides documentation of this facility's implementation of its obligation to operate according to good air pollution control practice.

Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with this emission point.

Authority for Requirement: 567 IAC 22.108(3)"b"

Emission Point ID Number: EP 46

Associated Equipment

Associated Emission Unit ID Number: EU 46
Emissions Control Equipment ID Number: CE 46
Emissions Control Equipment Description: Baghouse

Applicable Requirements

Emission Unit vented through this Emission Point: EU 46
Emission Unit Description: Hydrocal Finish #3B Cement Supply Bin
Raw Material/Fuel: Portland Cement
Rated Capacity: 22 tons/hr

Emission Limits (lb/hr, gr/dscf, lb/MMBtu, % opacity, etc.)
The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity
Emission Limit(s): 40% (1)
Authority for Requirement: 567 IAC 23.3(2)"d" Iowa DNR Construction Permit 75-A-164-S3

(1) Per DNR Air Quality Policy 3-b-08, Opacity Limits, an exceedence of the indicator opacity of 10% will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedence. The permit holder shall also file an "indicator opacity exceedence report" with the DNR field office and keep records as required in the policy. If exceedences continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: PM_{10}
Emission Limit(s): 0.40 lb/hr(2)
Authority for Requirement: Iowa DNR Construction Permit 75-A-164-S3

Pollutant: Particulate Matter
Emission Limit(s): 0.1 gr/dscf, 0.40 lb/hr(2)
Authority for Requirement: 567 IAC 23.3(2)"a" Iowa DNR Construction Permit 75-A-164-S3

(2) Standard is expressed as the average of 3 runs.

Emission Point Characteristics
The source shall be connected to the stack designated below.

Stack Height (feet): 70
Stack Diameter (inches): 12
Stack Exhaust Flow Rate (scfm): 2,200
Stack Temperature (^{o}F): 70
Vertical, Unobstructed Discharge Required: Yes ☒ No ☐
Authority for Requirement: Iowa DNR Construction Permit 75-A-164-S3

It shall be the owner's responsibility to ensure that construction conforms with the emission point characteristics stated above. If it is determined that any of the emission point characteristics are different than stated above, the owner must notify the Department and obtain a construction permit amendment, if required.

Periodic Monitoring Requirements
The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.

Stack Testing:

Pollutant - PM_{10}
Test to be Completed by – within two (2) years of permit issuance
Test Method - 40 CFR 51, Appendix M, 201A with 202
Authority for Requirement – Iowa DNR Construction Permit 75-A-164S3[(1)]

Notes:
[(1)] The stack testing requirement for EP 46 was fulfilled by completing the stack testing requirement for EP 45 (see page 95 for test results).

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☒ No ☐

Facility operation and maintenance plans must be sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the applicable requirements.

Facility operation and maintenance plans are to be developed by the facility within six(6) months of the issuance date of this permit and the data pertaining to the plan maintained on site for at least 5 years. The plan and associated recordkeeping provides documentation of this facility's implementation of its obligation to operate according to good air pollution control practice.

Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with this emission point.

Authority for Requirement: 567 IAC 22.108(3)"b"

Emission Point ID Number: EP 47

Associated Equipment

Associated Emission Unit ID Number: EU 47
Emissions Control Equipment ID Number: CE 47
Emissions Control Equipment Description: Baghouse

Applicable Requirements

Emission Unit vented through this Emission Point: EU 47
Emission Unit Description: Hydrocal Finish North Carbonate Supply Bin
Raw Material/Fuel: Calcium Carbonate
Rated Capacity: 40 tons/hr

Emission Limits (lb/hr, gr/dscf, lb/MMBtu, % opacity, etc.)
The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity
Emission Limit(s): 40% (1)
Authority for Requirement: 567 IAC 23.3(2)"d" Iowa DNR Construction Permit 75-A-168-S3

(1) Per DNR Air Quality Policy 3-b-08, Opacity Limits, an exceedence of the indicator opacity of 10% will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedence. The permit holder shall also file an "indicator opacity exceedence report" with the DNR field office and keep records as required in the policy. If exceedences continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: PM_{10}
Emission Limit(s): 0.94 lb/hr(2)
Authority for Requirement: Iowa DNR Construction Permit 75-A-168-S3

Pollutant: Particulate Matter
Emission Limit(s): 0.1 gr/dscf, 0.94 lb/hr(2)
Authority for Requirement: 567 IAC 23.3(2)"a" Iowa DNR Construction Permit 75-A-168-S3

(2) Standard is expressed as the average of 3 runs.

Emission Point Characteristics
The source shall be connected to the stack designated below.

Stack Height (feet): 80
Stack Diameter (inches): 12
Stack Exhaust Flow Rate (scfm): 2,200
Stack Temperature (^{o}F): 70
Vertical, Unobstructed Discharge Required: Yes ☒ No ☐
Authority for Requirement: Iowa DNR Construction Permit 75-A-168-S3

It shall be the owner's responsibility to ensure that construction conforms with the emission point characteristics stated above. If it is determined that any of the emission point characteristics are different than stated above, the owner must notify the Department and obtain a construction permit amendment, if required.

Periodic Monitoring Requirements
The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.

Stack Testing: (2)

Pollutant - PM_{10}
Test to be Completed by – within two (2) years from permit issuance
Test Method - 40 CFR 51, Appendix M, 201A with 202 (1)
Authority for Requirement - 567 IAC 22.108(3)

Notes:
(1) The stack testing requirement for EP 47 was fulfilled by completing the stack testing requirement for EP 48 (see page 101 for test results).

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☒ No ☐

Facility operation and maintenance plans must be sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the applicable requirements.

Facility operation and maintenance plans are to be developed by the facility within six(6) months of the issuance date of this permit and the data pertaining to the plan maintained on site for at least 5 years. The plan and associated recordkeeping provides documentation of this facility's implementation of its obligation to operate according to good air pollution control practice.

Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with this emission point.

Authority for Requirement: 567 IAC 22.108(3)"b"

Emission Point ID Number: EP 48

Associated Equipment

Associated Emission Unit ID Number: EU 48
Emissions Control Equipment ID Number: CE 48
Emissions Control Equipment Description: Bag Filter 11

Applicable Requirements

Emission Unit vented through this Emission Point: EU 48
Emission Unit Description: Hydrocal Finish South Cement Supply Bin
Raw Material/Fuel: Cement
Rated Capacity: 40 tons/hr

Emission Limits (lb/hr, gr/dscf, lb/MMBtu, % opacity, etc.)
The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity
Emission Limit(s): 40% (1)
Authority for Requirement: 567 IAC 23.3(2)"d" Iowa DNR Construction Permit 75-A-167-S5

(1) Per DNR Air Quality Policy 3-b-08, Opacity Limits, an exceedence of the indicator opacity of 10% will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedence. The permit holder shall also file an "indicator opacity exceedence report" with the DNR field office and keep records as required in the policy. If exceedences continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: PM_{10}
Emission Limit(s): 0.94 lb/hr(2)
Authority for Requirement: Iowa DNR Construction Permit 75-A-167-S5

Pollutant: Particulate Matter
Emission Limit(s): 0.1 gr/dscf, 0.94 lb/hr(2)
Authority for Requirement: 567 IAC 23.3(2)"a" Iowa DNR Construction Permit 75-A-167-S5

(2) Standard is expressed as the average of 3 runs.

Emission Point Characteristics
This emission point shall conform to the specifications listed below.

Stack Height (ft, from the ground): 80
Stack Opening (inches, dia.): 12
Stack Temperature (^{o}F): 70
Exhaust Flowrate (scfm): 2,200
Vertical, Unobstructed Discharge Required: Yes ☒ No ☐
Authority for Requirement: Iowa DNR Construction Permit 75-A-167-S5

It shall be the owner's responsibility to ensure that construction conforms with the emission point characteristics stated above. If it is determined that any of the emission point characteristics are different than stated above, the owner must notify the Department and obtain a construction permit amendment, if required.

Periodic Monitoring Requirements
The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.

Stack Testing Completed:

Pollutant - PM_{10}
Stack Test – March 21, 2000
Result Concentration – 0.011 gr/dscf
Result Emission Rate – 0.18 lb/hr
Test Method - 40 CFR 51, Appendix M, 201A with 202
Authority for Requirement - 567 IAC 22.108(3)

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☒ No ☐

Facility operation and maintenance plans must be sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the applicable requirements.

Facility operation and maintenance plans are to be developed by the facility within six(6) months of the issuance date of this permit and the data pertaining to the plan maintained on site for at least 5 years. The plan and associated recordkeeping provides documentation of this facility's implementation of its obligation to operate according to good air pollution control practice.

Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with this emission point.

Authority for Requirement: 567 IAC 22.108(3)"b"

Emission Point ID Number: EP 49

Associated Equipment

Associated Emission Unit ID Number: EU 49

Applicable Requirements

Emission Unit vented through this Emission Point: EU 49
Emission Unit Description: Hydrocal Finish Bulk Loading Drag Conveyor #1
Raw Material/Fuel: Calcined Gypsum
Rated Capacity: 170 tons/hr

Emission Limits (lb/hr, gr/dscf, lb/MMBtu, % opacity, etc.)
The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity (fugitive)
Emission Limit(s): 10%
Authority for Requirement: Iowa DNR Construction Permit 03-A-118
567 IAC 23.1(2)"bbb", 40 CFR 60.672(b)

Periodic Monitoring Requirements
The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.

Opacity Monitoring
The facility shall check the opacity weekly during a period when the emission unit on this emission point is at or near full capacity and record the reading. Opacity shall be observed to ensure that no visible emissions occur during the material handling operation of the unit. If visible emissions are observed corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If corrective action does not return the observation to no visible emissions, then a Method 9 observation will be required. If an opacity greater than 10 % is observed, this would be a violation and corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake opacity readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits.

Weekly observations shall be conducted for a minimum of eight (8) consecutive weeks after permit issuance.
If no visible emissions are observed during this period then:

- Opacity observations shall be made once every other week for a duration of sixteen (16) weeks. If visible emissions are observed, monitoring reverts back to weekly.

If no visible emissions are observed during this period then:

- Observations shall be made once per month. If visible emissions are observed, monitoring reverts back to weekly.

If the source reverts back to weekly monitoring at any time, monitoring frequency will progress in an identical manner from the initial monitoring schedule.

Recordkeeping:
Maintain a written record of the observation and any action resulting from the observation. Records shall be maintained on-site for five (5) years and made available to representatives of the DNR upon request.

Stack Testing:

Pollutant - Opacity
Stack Test to be Completed by (date) – within sixty (60) days after achieving maximum production rate and no later than 180 days after the initial startup date.
Test Method – 40 CFR 60, Appendix A, Method 22
Authority for Requirement – Iowa DNR Construction Permit 03-A-118
40 CFR 60.675(c)
567 IAC 23.1(2)"bbb"

The owner of this equipment or the owner's authorized agent shall provide written notice to the Director, not less than 30 days before a required stack test or performance evaluation of a continuous emission monitor. Results of the test shall be submitted in writing to the Director in the form of a comprehensive report within 6 weeks of the completion of the testing. 567 IAC 25.1(7)

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)"b"

Emission Point ID Number: EP 50

Associated Equipment

Associated Emission Unit ID Number: EU 50
Emissions Control Equipment ID Number: CE 50
Emissions Control Equipment Description: Bag Filter 4

Applicable Requirements

Emission Units vented through this Emission Point: See table below
Emission Unit Description: Hydrocal Finish Packers & Conveyors
Raw Material/Fuel: Hydrocal
Rated Capacity: See table below

The following emission units vent to the baghouse connected to this emission point:

Emission Unit Description	Maximum Capacity
#2 Mixer South Screen (EU 50B)	120 tons/hr
#2 Mixer North Screen (EU 50D)	120 tons/hr
#2 Mixer North Weigh Hopper (EU 50F)	70 tons/hr
#2 Mixer South Weigh Hopper (EU 50H)	70 tons/hr
Mixer #2 (EU 50L)	90 tons/hr
#2 Bag Packer (EU 50N)	90 tons/hr
Three Waste Screw Conveyors (EU 50P)	90 tons/hr
Packer Spill Waste Elevator (EU 50Q)	60 tons/hr
#2 Packer Belt Conveyor (EU 50S)	3 tons/hr
Type 1 Cement #2 Mixer Weigh Hopper (EU 50T)	3 tons/hr
Landplaster Bag Packing Bin (EU 50U)	12 tons/hr

Authority for Requirement: Iowa DNR Construction Permit 75-A-160-S5

Emission Limits (lb/hr, gr/dscf, lb/MMBtu, % opacity, etc.)
The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity
Emission Limit(s): 40% (1)
Authority for Requirement: 567 IAC 23.3(2)"d" Iowa DNR Construction Permit 75-A-160-S5

(1) Per DNR Air Quality Policy 3-b-08, Opacity Limits, an exceedence of the indicator opacity of 10% will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedence. The permit holder shall also file an "indicator opacity exceedence report" with the DNR field office and keep records as required in the policy. If exceedences continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: PM_{10}
Emission Limit(s): 1.715 lb/hr[(2)]
Authority for Requirement: Iowa DNR Construction Permit 75-A-160-S5

Pollutant: Particulate Matter
Emission Limit(s): 0.1 gr/dscf, 1.715 lb/hr[(2)]
Authority for Requirement: 567 IAC 23.3(2)"a" Iowa DNR Construction Permit 75-A-160-S5

[(2)] Standard is expressed as the average of 3 runs.

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Process throughput:
A. The throughput of this system shall not exceed 675,000 tons per 12-month rolling period.

Reporting & Record keeping:
Records shall be kept on-site for at least 5 years and shall be available for inspection by the Department. Records shall be maintained in a legible and orderly manner and shall indicate the following:
A. Calculate the throughput of the system on a rolling 12-month basis for each month of operation.

Authority for Requirement: Iowa DNR Construction Permit 75-A-160-S5

Emission Point Characteristics

This emission point shall conform to the specifications listed below.

Stack Height (ft, from the ground): 80
Stack Opening (inches, dia.): 18
Exhaust Temperature (^{o}F): 70
Exhaust Flowrate (scfm): 10,000
Vertical, Unobstructed Discharge Required: Yes ☒ No ☐
Authority for Requirement: Iowa DNR Construction Permit 75-A-160-S5

It shall be the owner's responsibility to ensure that construction conforms with the emission point characteristics stated above. If it is determined that any of the emission point characteristics are different than stated above, the owner must notify the Department and obtain a construction permit amendment, if required.

Periodic Monitoring Requirements

The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.

Stack Testing:

Pollutant - PM_{10}
Stack Test Completed on March 21-22, 2000
Result Concentration – 0.007 gr/dscf
Result Emission Rate – 0.45 lb/hr
Test Method - 40 CFR 51, Appendix M, 201A with 202
Authority for Requirement - Iowa DNR Construction Permit 75-A-160-S5

The owner of this equipment or the owner's authorized agent shall provide written notice to the Director, not less than 30 days before a required stack test or performance evaluation of a continuous emission monitor. Results of the test shall be submitted in writing to the Director in the form of a comprehensive report within 6 weeks of the completion of the testing. 567 IAC 25.1(7)

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☒ No ☐

Facility operation and maintenance plans must be sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the applicable requirements.

Facility operation and maintenance plans are to be developed by the facility within six(6) months of the issuance date of this permit and the data pertaining to the plan maintained on site for at least 5 years. The plan and associated recordkeeping provides documentation of this facility's implementation of its obligation to operate according to good air pollution control practice.

Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with this emission point.

Authority for Requirement: 567 IAC 22.108(3)"b"

Emission Point ID Number: EP 52

Associated Equipment

Associated Emission Unit ID Number: EU 52
Emissions Control Equipment ID Number: CE 52
Emissions Control Equipment Description: Baghouse

Applicable Requirements

Emission Unit vented through this Emission Point: See table below
Emission Unit Description: Hydrocal Finish Type 1 Cement Storage
Raw Material/Fuel: Portland Cement
Rated Capacity: See table below

The following emission units vent to the baghouse connected to this emission point:

Emission Unit Description	Maximum Capacity
Type 1 Cement Storage Bin A (EU 52A)	4 tons/hr
Type 1 Cement Storage Bin B (EU 52B)	4 tons/hr

Authority for Requirement: Iowa DNR Construction Permit 80-A-138-S3

Emission Limits (lb/hr, gr/dscf, lb/MMBtu, % opacity, etc.)
The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity
Emission Limit(s): 40% (1)
Authority for Requirement: 567 IAC 23.3(2)"d" Iowa DNR Construction Permit 80-A-138-S3

(1) Per DNR Air Quality Policy 3-b-08, Opacity Limits, an exceedence of the indicator opacity of 10% will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedence. The permit holder shall also file an "indicator opacity exceedence report" with the DNR field office and keep records as required in the policy. If exceedences continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: PM_{10}
Emission Limit(s): 0.51 lb/hr
Authority for Requirement: Iowa DNR Construction Permit 80-A-138-S3

Pollutant: Particulate Matter
Emission Limit(s): 0.1 gr/dscf
Authority for Requirement: 567 IAC 23.3(2)"a" Iowa DNR Construction Permit 80-A-138-S3

Emission Point Characteristics
The source shall be connected to the stack designated below.

Stack Height (feet): 80
Stack Diameter (inches): 12
Stack Exhaust Flow Rate (scfm): 2,000
Stack Temperature (^{o}F): 350
Vertical, Unobstructed Discharge Required: Yes ☒ No ☐
Authority for Requirement: Iowa DNR Construction Permit 80-A-138-S3

It shall be the owner's responsibility to ensure that construction conforms with the emission point characteristics stated above. If it is determined that any of the emission point characteristics are different than stated above, the owner must notify the Department and obtain a construction permit amendment, if required.

Periodic Monitoring Requirements
The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.

Stack Testing:

Pollutant - PM_{10}
Stack Test Completed on March 20, 2000
Result Concentration – 0.014 gr/dscf
Result Emission Rate – 0.25 lb/hr
Test Method - 40 CFR 51, Appendix M, 201A with 202
Authority for Requirement - Iowa DNR Construction Permit 80-A-138-S2

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☒ No ☐

Facility operation and maintenance plans must be sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the applicable requirements.

Facility operation and maintenance plans are to be developed by the facility within six(6) months of the issuance date of this permit and the data pertaining to the plan maintained on site for at least 5 years. The plan and associated recordkeeping provides documentation of this facility's implementation of its obligation to operate according to good air pollution control practice.

Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with this emission point.

Authority for Requirement: 567 IAC 22.108(3)"b"

Emission Point ID Number: EP 55

Associated Equipment
Associated Emission Unit ID Number: EU 55
Emissions Control Equipment ID Number: CE 55
Emissions Control Equipment Description: Baghouse (vents inside building)

Applicable Requirements

Emission Unit vented through this Emission Point: EU 55
Emission Unit Description: Cement Bin
Raw Material/Fuel: Portland Cement
Rated Capacity: 17.3 tons/hr

Emission Limits (lb/hr, gr/dscf, lb/MMBtu, % opacity, etc.)
The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity
Emission Limit(s): 40 %
Authority for Requirement: 567 IAC 23.3(2)"d" Iowa DNR Construction Permit 80-A-137-S1

Pollutant: PM_{10}
Emission Limit(s): 0.11 lb/hr[(1)]
Authority for Requirement: Iowa DNR Construction Permit 80-A-137-S1

Pollutant: Particulate Matter
Emission Limit(s): 0.1 gr/scf, 0.11 lb/hr[(1)]
Authority for Requirement: 567 IAC 23.4(11) Iowa DNR Construction Permit 80-A-137-S1

(1) Standard is expressed as the average of 3 runs.

Emission Point Characteristics
The emission point shall conform to the specifications listed below.

Stack Exhaust Flow Rate (scfm): 500
Stack Temperature (^{o}F): 200
Authority for Requirement: Iowa DNR Construction Permit 80-A-137-S1

It shall be the owner's responsibility to ensure that construction conforms with the emission point characteristics stated above. If it is determined that any of the emission point characteristics are different than stated above, the owner must notify the Department and obtain a construction permit amendment, if required.

Periodic Monitoring Requirements

The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)"b"

Emission Point ID Number: EP 56

Associated Equipment

Associated Emission Unit ID Number: EU 56
Emissions Control Equipment ID Number: CE 56
Emissions Control Equipment Description: Baghouse

Applicable Requirements

Emission Unit vented through this Emission Point: See table below
Emission Unit Description: Hydrocal Finish Packers & Conveyors #2
Raw Material/Fuel: Hydrocal
Rated Capacity: See table below

The following emission units vent to the baghouse connected to this emission point:

Emission Unit Description	Maximum Capacity
#1 Mixer North Screen (EU 56A)	120 tons/hr
#1 Mixer South Screen (EU 56B)	120 tons/hr
#1 Mixer North Weigh Hopper (EU 56C)	70 tons/hr
#1 Mixer South Weigh Hopper (EU 56D)	70 tons/hr
#1 Mixer Bag Dump Station (EU 56E)	20 tons/hr
Type 1 Cement #1 Mixer Weigh Hopper (EU 56F)	70 tons/hr
Mixer #1 (EU 56G)	90 tons/hr
#1 Mixer East Screen (EU 56H)	35 tons/hr
#1 Mixer East Weigh Hopper (EU 56I)	35 tons/hr
Bulk Loading Surge Hopper (EU 56J)	90 tons/hr
#1 Bag Packer (EU 56K)	90 tons/hr
#1 Packer Belt Conveyor (EU 56L)	3 tons/hr

Authority for Requirement: Iowa DNR Construction Permit 02-A-684

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)
The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity
Emission Limit(s): 7 %
Authority for Requirement: Iowa DNR Construction Permit 02-A-684
567 IAC 23.1(2)"bbb", 40 CFR 60.672(a)(2)

Pollutant: PM_{10}
Emission Limit(s): 2.26 lb/hr[(1)]
Authority for Requirement: Iowa DNR Construction Permit 02-A-684

Pollutant: Particulate Matter
Emission Limit(s): 0.05 grams/dscm, 0.022 gr/dscf, 2.26 lb/hr[(1)]
Authority for Requirement: Iowa DNR Construction Permit 02-A-684
567 IAC 23.1(2)"bbb", 40 CFR 60.672(a)(1)

[(1)] Standard is expressed as the average of 3 runs.

Emission Point Characteristics
The emission point shall conform to the specifications listed below.

Stack Height (feet): 80
Stack Diameter (inches): 20
Stack Exhaust Flow Rate (scfm): 12,000
Stack Temperature (^{o}F): 70
Vertical, Unobstructed Discharge Required: Yes ☒ No ☐
Authority for Requirement: Iowa DNR Construction Permit 02-A-684

It shall be the owner's responsibility to ensure that construction conforms with the emission point characteristics stated above. If it is determined that any of the emission point characteristics are different than stated above, the owner must notify the Department and obtain a construction permit amendment, if required.

Periodic Monitoring Requirements
The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.

Opacity Monitoring
The facility shall check the opacity weekly during a period when the emission unit on this emission point is at or near full capacity and record the reading. Opacity shall be observed to ensure that no visible emissions occur during the material handling operation of the unit. If visible emissions are observed corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If corrective action does not return the observation to no visible emissions, then a Method 9 observation will be required. If an opacity greater than 7 % is observed, this would be a violation and corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake opacity readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits.

Weekly observations shall be conducted for a minimum of eight (8) consecutive weeks after permit issuance.
If no visible emissions are observed during this period then:

- Opacity observations shall be made once every other week for a duration of sixteen (16) weeks. If visible emissions are observed, monitoring reverts back to weekly.

If no visible emissions are observed during this period then:

- Observations shall be made once per month. If visible emissions are observed, monitoring reverts back to weekly.

If the source reverts back to weekly monitoring at any time, monitoring frequency will progress in an identical manner from the initial monitoring schedule.

Recordkeeping:
Maintain a written record of the observation and any action resulting from the observation. Records shall be maintained on-site for five (5) years and made available to representatives of the DNR upon request.

Stack Testing:

Pollutant – PM_{10}
Stack Test to be Completed by (date) - within sixty (60) days after achieving maximum production rate and no later than one hundred eighty (180) days after the initial startup date
Test Method – 40 CFR 51, Appendix M, 201A with 202(1)
Authority for Requirement – Iowa DNR Construction Permit 02-A-684(2)

Pollutant – Particulate Matter
Stack Test to be Completed by (date) - within sixty (60) days after achieving maximum production rate and no later than one hundred eighty (180) days after the initial startup date
Test Method – 40 CFR 60, Appendix A, Method 5
Authority for Requirement – Iowa DNR Construction Permit 02-A-684(2)

Pollutant - Opacity
Stack Test to be Completed by (date) - within sixty (60) days after achieving maximum production rate and no later than one hundred eighty (180) days after the initial startup date
Test Method – 40 CFR 60, Appendix A, Method 9
Authority for Requirement – Iowa DNR Construction Permit 02-A-684(2)

Notes:
(1) Or approved alternative
(2) Minimum Test Run Time = 1 hour

The owner of this equipment or the owner's authorized agent shall provide written notice to the Director, not less than 30 days before a required stack test or performance evaluation of a continuous emission monitor. Results of the test shall be submitted in writing to the Director in the form of a comprehensive report within 6 weeks of the completion of the testing. 567 IAC 25.1(7)

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☒ No ☐

Facility operation and maintenance plans must be sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the applicable requirements.

Facility operation and maintenance plans are to be developed by the facility within six(6) months of the issuance date of this permit and the data pertaining to the plan maintained on site for at least 5 years. The plan and associated recordkeeping provides documentation of this facility's implementation of its obligation to operate according to good air pollution control practice.

Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with this emission point.

Authority for Requirement: 567 IAC 22.108(3)"b"

Emission Point ID Number: EP 58

Associated Equipment

Associated Emission Unit ID Number(s): EU 58
Emissions Control Equipment ID Number: CE 58
Emissions Control Equipment Description: Baghouse

Applicable Requirements

Emission Unit vented through this Emission Point: EU 58
Emission Unit Description: Hydrocal C Base Grinding and Conveying Equipment
Raw Material/Fuel: Hydrocal
Rated Capacity: 10 tons/hr

Emission Limits (lb/hr, gr/dscf, lb/MMBtu, % opacity, etc.)
The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity
Emission Limit(s): 7 %
Authority for Requirement: Iowa DNR Construction Permit 93-A-159-S3
567 IAC 23.1(2)"bbb", 40 CFR 60.672(a)(2)

Pollutant: PM_{10}
Emission Limit(s): 0.28 lb/hr[(1)]
Authority for Requirement: Iowa DNR Construction Permit 93-A-159-S3

Pollutant: Particulate Matter
Emission Limit(s): 0.05 grams/dscm, 0.022 gr/dscf, 0.28 lb/hr[(1)]
Authority for Requirement: Iowa DNR Construction Permit 93-A-159-S3
567 IAC 23.1(2)"bbb", 40 CFR 60.672(a)(1)

(1) Standard is expressed as the average of 3 runs.

Emission Point Characteristics
The source shall be connected to the stack designated below.

Stack Height (feet): 60
Stack Diameter (inches): 14
Stack Exhaust Flow Rate (scfm): 1,200
Stack Temperature (^{o}F): 200
Vertical, Unobstructed Discharge Required: Yes ☒ No ☐
Authority for Requirement: Iowa DNR Construction Permit 93-A-159-S3

It shall be the owner's responsibility to ensure that construction conforms with the emission point characteristics stated above. If it is determined that any of the emission point characteristics are different than stated above, the owner must notify the Department and obtain a construction permit amendment, if required.

Periodic Monitoring Requirements
The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.

Opacity Monitoring
The facility shall check the opacity weekly during a period when the emission unit on this emission point is at or near full capacity and record the reading. Opacity shall be observed to ensure that no visible emissions occur during the material handling operation of the unit. If visible emissions are observed corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If corrective action does not return the observation to no visible emissions, then a Method 9 observation will be required. If an opacity greater than 7 % is observed, this would be a violation and corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake opacity readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits.

Weekly observations shall be conducted for a minimum of eight (8) consecutive weeks after permit issuance.
If no visible emissions are observed during this period then:
- Opacity observations shall be made once every other week for a duration of sixteen (16) weeks. If visible emissions are observed, monitoring reverts back to weekly.

If no visible emissions are observed during this period then:
- Observations shall be made once per month. If visible emissions are observed, monitoring reverts back to weekly.

If the source reverts back to weekly monitoring at any time, monitoring frequency will progress in an identical manner from the initial monitoring schedule.

Recordkeeping:
Maintain a written record of the observation and any action resulting from the observation. Records shall be maintained on-site for five (5) years and made available to representatives of the DNR upon request.

Stack Testing:

Pollutant - PM_{10}
Stack Test to be Completed by (date) - 2 years from permit issuance
Test Method - 40 CFR 51, Appendix M, 201A with 202 (1)
Authority for Requirement - 567 IAC 22.108(3)

Pollutant - Particulate Matter
Stack Test to be Completed by (date) - 2 years from permit issuance
Test Method - Iowa Compliance Sampling Manual Method 5
Authority for Requirement - 567 IAC 22.108(3)

Notes:
(1) Or approved alternative.

The owner of this equipment or the owner's authorized agent shall provide written notice to the Director, not less than 30 days before a required stack test or performance evaluation of a continuous emission monitor. Results of the test shall be submitted in writing to the Director in the form of a comprehensive report within 6 weeks of the completion of the testing. 567 IAC 25.1(7)

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☒ No ☐

Facility operation and maintenance plans must be sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the applicable requirements.

Facility operation and maintenance plans are to be developed by the facility within six(6) months of the issuance date of this permit and the data pertaining to the plan maintained on site for at least 5 years. The plan and associated recordkeeping provides documentation of this facility's implementation of its obligation to operate according to good air pollution control practice.

Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with this emission point.

Authority for Requirement: 567 IAC 22.108(3)"b"

Emission Point ID Number: EP 59

Associated Equipment

Associated Emission Unit ID Numbers: EU 59, EU 60
Emissions Control Equipment ID Number: CE 59
Emissions Control Equipment Description: Baghouse

Applicable Requirements

Emission Unit vented through this Emission Point: EU 59
Emission Unit Description: Hydrocal C Base Dryer Mill
Raw Material/Fuel: Hydrocal
Rated Capacity: 10 tons/hr

Emission Unit vented through this Emission Point: EU 60
Emission Unit Description: Hydrocal C Base Dryer Mill (Combustion)
Raw Material/Fuel: Natural Gas
Rated Capacity: 10 MMBtu/hr

Emission Limits (lb/hr, gr/dscf, lb/MMBtu, % opacity, etc.)
The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity
Emission Limit(s): 7 %
Authority for Requirement: Iowa DNR Construction Permit 93-A-160-S3
567 IAC 23.1(2)"bbb", 40 CFR 60.672(a)(2)

Pollutant: PM_{10}
Emission Limit(s): 1.03 lb/hr
Authority for Requirement: Iowa DNR Construction Permit 93-A-160-S3

Pollutant: Particulate Matter
Emission Limit(s): 0.022 gr/dscf (0.05 grams/dscm)
Authority for Requirement: Iowa DNR Construction Permit 93-A-160-S3
567 IAC 23.1(2)"bbb", 40 CFR 60.672(a)(1)

Pollutant: Sulfur Dioxide (SO_2)
Emission Limit(s): 500 ppmv
Authority for Requirement: 567 IAC 23.3(3)"e"

Emission Point Characteristics
This emission point shall conform to the specifications listed below.

Stack Height (ft, from the ground): 69
Stack Opening (inches, dia.): 24
Stack Temperature (^{o}F): 280
Stack Exhaust Flow Rate (scfm): 8,800
Vertical, Unobstructed Discharge Required: Yes ☒ No ☐
Authority for Requirement: Iowa DNR Construction Permit 93-A-160-S3

It shall be the owner's responsibility to ensure that construction conforms with the emission point characteristics stated above. If it is determined that any of the emission point characteristics are different than stated above, the owner must notify the Department and obtain a construction permit amendment, if required.

Periodic Monitoring Requirements
The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.

Opacity Monitoring
The facility shall check the opacity weekly during a period when the emission unit on this emission point is at or near full capacity and record the reading. Opacity shall be observed to ensure that no visible emissions occur during the material handling operation of the unit. If visible emissions are observed corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If corrective action does not return the observation to no visible emissions, then a Method 9 observation will be required. If an opacity greater than 7 % is observed, this would be a violation and corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake opacity readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits.

Weekly observations shall be conducted for a minimum of eight (8) consecutive weeks after permit issuance.
If no visible emissions are observed during this period then:
- Opacity observations shall be made once every other week for a duration of sixteen (16) weeks. If visible emissions are observed, monitoring reverts back to weekly.

If no visible emissions are observed during this period then:
- Observations shall be made once per month. If visible emissions are observed, monitoring reverts back to weekly.

If the source reverts back to weekly monitoring at any time, monitoring frequency will progress in an identical manner from the initial monitoring schedule.

Recordkeeping:
Maintain a written record of the observation and any action resulting from the observation. Records shall be maintained on-site for five (5) years and made available to representatives of the DNR upon request.

Stack Testing:

Pollutant - PM_{10}
Stack Test to be Completed by (date) - 2 years from permit issuance
Test Method - 40 CFR 51, Appendix M, 201A with 202 (1)
Authority for Requirement - 567 IAC 22.108(3)

Pollutant - Particulate Matter
Stack Test to be Completed by (date) - 2 years from permit issuance
Test Method - Iowa Compliance Sampling Manual Method 5
Authority for Requirement - 567 IAC 22.108(3)

Notes:
(1) Or approved alternative.

The owner of this equipment or the owner's authorized agent shall provide written notice to the Director, not less than 30 days before a required stack test or performance evaluation of a continuous emission monitor. Results of the test shall be submitted in writing to the Director in the form of a comprehensive report within 6 weeks of the completion of the testing. 567 IAC 25.1(7)

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☒ No ☐

Facility operation and maintenance plans must be sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the applicable requirements.

Facility operation and maintenance plans are to be developed by the facility within six(6) months of the issuance date of this permit and the data pertaining to the plan maintained on site for at least 5 years. The plan and associated recordkeeping provides documentation of this facility's implementation of its obligation to operate according to good air pollution control practice.

Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with this emission point.

Authority for Requirement: 567 IAC 22.108(3)"b"

Emission Point ID Number: EP 61

Associated Equipment

Associated Emission Unit ID Number: EU 61
Emissions Control Equipment ID Number: CE 61
Emissions Control Equipment Description: Baghouse

Applicable Requirements

Emission Unit vented through this Emission Point: EU 61
Emission Unit Description: Hydrocal C Base Tube Mill Feed Bin
Raw Material/Fuel: Hydrocal
Rated Capacity: 10 tons/hr

Emission Limits (lb/hr, gr/dscf, lb/MMBtu, % opacity, etc.)
The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity
Emission Limit(s): 7 %
Authority for Requirement: Iowa DNR Construction Permit 93-A-161-S2
567 IAC 23.1(2)"bbb", 40 CFR 60.672(a)(2)

Pollutant: PM_{10}
Emission Limit(s): 0.05 lb/hr[(1)]
Authority for Requirement: Iowa DNR Construction Permit 93-A-161S2

Pollutant: Particulate Matter
Emission Limit(s): 0.05 grams/dscm, 0.022 gr/dscf, 0.05 lb/hr[(1)]
Authority for Requirement: Iowa DNR Construction Permit 93-A-161-S2
567 IAC 23.1(2)"bbb", 40 CFR 60.672(a)(1)

[(1)] Standard is expressed as the average of 3 runs.

Emission Point Characteristics
The source emissions shall be exhausted from the following exit point.

Stack Height (feet): 60
Stack Diameter (inches): 8
Stack Exhaust Flow Rate (scfm): 500
Stack Temperature (^{o}F): 190
Vertical, Unobstructed Discharge Required: Yes ☒ No ☐
Authority for Requirement: Iowa DNR Construction Permit 93-A-161-S2

It shall be the owner's responsibility to ensure that construction conforms with the emission point characteristics stated above. If it is determined that any of the emission point characteristics are different than stated above, the owner must notify the Department and obtain a construction permit amendment, if required.

Periodic Monitoring Requirements
The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.

Opacity Monitoring
The facility shall check the opacity weekly during a period when the emission unit on this emission point is at or near full capacity and record the reading. Opacity shall be observed to ensure that no visible emissions occur during the material handling operation of the unit. If visible emissions are observed corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If corrective action does not return the observation to no visible emissions, then a Method 9 observation will be required. If an opacity greater than 7 % is observed, this would be a violation and corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake opacity readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits.

Weekly observations shall be conducted for a minimum of eight (8) consecutive weeks after permit issuance.
If no visible emissions are observed during this period then:
- Opacity observations shall be made once every other week for a duration of sixteen (16) weeks. If visible emissions are observed, monitoring reverts back to weekly.

If no visible emissions are observed during this period then:
- Observations shall be made once per month. If visible emissions are observed, monitoring reverts back to weekly.

If the source reverts back to weekly monitoring at any time, monitoring frequency will progress in an identical manner from the initial monitoring schedule.

Recordkeeping:
Maintain a written record of the observation and any action resulting from the observation. Records shall be maintained on-site for five (5) years and made available to representatives of the DNR upon request.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☒ No ☐

Facility operation and maintenance plans must be sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the applicable requirements.

Facility operation and maintenance plans are to be developed by the facility within six(6) months of the issuance date of this permit and the data pertaining to the plan maintained on site for at least 5 years. The plan and associated recordkeeping provides documentation of this facility's implementation of its obligation to operate according to good air pollution control practice.

Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with this emission point.

Authority for Requirement: 567 IAC 22.108(3)"b"

Emission Point ID Number: EP 62

Associated Equipment

Associated Emission Unit ID Number: EU 62
Emissions Control Equipment ID Number: CE 62
Emissions Control Equipment Description: Baghouse

Applicable Requirements

Emission Unit vented through this Emission Point: EU 62
Emission Unit Description: Hydrocal C Base Packing Supply Bin
Raw Material/Fuel: Hydrocal
Rated Capacity: 10 tons/hr

Emission Limits (lb/hr, gr/dscf, lb/MMBtu, % opacity, etc.)
The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity
Emission Limit(s): 7 %
Authority for Requirement: Iowa DNR Construction Permit 93-A-162-S3
567 IAC 23.1(2)"bbb", 40 CFR 60.672(a)(2)

Pollutant: PM_{10}
Emission Limit(s): 0.21 lb/hr[(1)]
Authority for Requirement: Iowa DNR Construction Permit 93-A-162-S3

Pollutant: Particulate Matter
Emission Limit(s): 0.05 grams/dscm, 0.022 gr/dscf, 0.21 lb/hr[(1)]
Authority for Requirement: Iowa DNR Construction Permit 93-A-162-S3
567 IAC 23.1(2)"bbb", 40 CFR 60.672(a)(1)

(1) Standard is expressed as the average of 3 runs.

Emission Point Characteristics
The source shall be connected to the stack designated below.

Stack Height (feet): 60
Stack Diameter (inches): 8
Stack Exhaust Flow Rate (scfm): 1,000
Stack Temperature (^{o}F): 125
Vertical, Unobstructed Discharge Required: Yes ☒ No ☐
Authority for Requirement: Iowa DNR Construction Permit 93-A-162-S3

It shall be the owner's responsibility to ensure that construction conforms with the emission point characteristics stated above. If it is determined that any of the emission point characteristics are different than stated above, the owner must notify the Department and obtain a construction permit amendment, if required.

Periodic Monitoring Requirements
The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.

Opacity Monitoring
The facility shall check the opacity weekly during a period when the emission unit on this emission point is at or near full capacity and record the reading. Opacity shall be observed to ensure that no visible emissions occur during the material handling operation of the unit. If visible emissions are observed corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If corrective action does not return the observation to no visible emissions, then a Method 9 observation will be required. If an opacity greater than 7 % is observed, this would be a violation and corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake opacity readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits.

Weekly observations shall be conducted for a minimum of eight (8) consecutive weeks after permit issuance.
If no visible emissions are observed during this period then:
- Opacity observations shall be made once every other week for a duration of sixteen (16) weeks. If visible emissions are observed, monitoring reverts back to weekly.

If no visible emissions are observed during this period then:
- Observations shall be made once per month. If visible emissions are observed, monitoring reverts back to weekly.

If the source reverts back to weekly monitoring at any time, monitoring frequency will progress in an identical manner from the initial monitoring schedule.

Recordkeeping:
Maintain a written record of the observation and any action resulting from the observation. Records shall be maintained on-site for five (5) years and made available to representatives of the DNR upon request.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☒ No ☐

Facility operation and maintenance plans must be sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the applicable requirements.

Facility operation and maintenance plans are to be developed by the facility within six(6) months of the issuance date of this permit and the data pertaining to the plan maintained on site for at least 5 years. The plan and associated recordkeeping provides documentation of this facility's implementation of its obligation to operate according to good air pollution control practice.

Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with this emission point.

Authority for Requirement: 567 IAC 22.108(3)"b"

Emission Point ID Number: EP 63

Associated Equipment

Associated Emission Unit ID Number: EU 63
Emissions Control Equipment ID Number: CE 63
Emissions Control Equipment Description: Baghouse

Applicable Requirements

Emission Unit vented through this Emission Point: EU 63
Emission Unit Description: Hydrocal C Base Landplaster Bin
Raw Material/Fuel: Landplaster
Rated Capacity: 10 tons/hr

Emission Limits (lb/hr, gr/dscf, lb/MMBtu, % opacity, etc.)
The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity
Emission Limit(s): 7 %
Authority for Requirement: Iowa DNR Construction Permit 93-A-164-S3
567 IAC 23.1(2)"bbb", 40 CFR 60.672(a)(2)

Pollutant: PM_{10}
Emission Limit(s): 0.19 lb/hr(1)
Authority for Requirement: Iowa DNR Construction Permit 93-A-164-S3

Pollutant: Particulate Matter
Emission Limit(s): 0.05 grams/dscm, 0.022 gr/dscf, 0.19 lb/hr(1)
Authority for Requirement: Iowa DNR Construction Permit 93-A-164-S3
567 IAC 23.1(2)"bbb", 40 CFR 60.672(a)(1)

(1) Standard is expressed as the average of 3 runs.

Emission Point Characteristics
The source shall be connected to the stack designated below.

Stack Height (feet): 60
Stack Diameter (inches): 8
Stack Exhaust Flow Rate (scfm): 1,000
Stack Temperature (^{o}F): 105
Vertical, Unobstructed Discharge Required: Yes ☒ No ☐
Authority for Requirement: Iowa DNR Construction Permit 93-A-164-S3

It shall be the owner's responsibility to ensure that construction conforms with the emission point characteristics stated above. If it is determined that any of the emission point characteristics are different than stated above, the owner must notify the Department and obtain a construction permit amendment, if required.

Periodic Monitoring Requirements
The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.

Opacity Monitoring
The facility shall check the opacity weekly during a period when the emission unit on this emission point is at or near full capacity and record the reading. Opacity shall be observed to ensure that no visible emissions occur during the material handling operation of the unit. If visible emissions are observed corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If corrective action does not return the observation to no visible emissions, then a Method 9 observation will be required. If an opacity greater than 7 % is observed, this would be a violation and corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake opacity readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits.

Weekly observations shall be conducted for a minimum of eight (8) consecutive weeks after permit issuance.
If no visible emissions are observed during this period then:
- Opacity observations shall be made once every other week for a duration of sixteen (16) weeks. If visible emissions are observed, monitoring reverts back to weekly.

If no visible emissions are observed during this period then:
- Observations shall be made once per month. If visible emissions are observed, monitoring reverts back to weekly.

If the source reverts back to weekly monitoring at any time, monitoring frequency will progress in an identical manner from the initial monitoring schedule.

Recordkeeping:
Maintain a written record of the observation and any action resulting from the observation. Records shall be maintained on-site for five (5) years and made available to representatives of the DNR upon request.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☒ No ☐

Facility operation and maintenance plans must be sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the applicable requirements.

Facility operation and maintenance plans are to be developed by the facility within six(6) months of the issuance date of this permit and the data pertaining to the plan maintained on site for at least 5 years. The plan and associated recordkeeping provides documentation of this facility's implementation of its obligation to operate according to good air pollution control practice.

Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with this emission point.

Authority for Requirement: 567 IAC 22.108(3)"b"

Emission Point ID Number: EP 64

Associated Equipment

Associated Emission Unit ID Number: EU 64
Emissions Control Equipment ID Number: CE 64
Emissions Control Equipment Description: Baghouse

Applicable Requirements

Emission Unit vented through this Emission Point: EU 64
Emission Unit Description: Hydrocal Bulk Loading
Raw Material/Fuel: Hydrocal
Rated Capacity: 50 tons/hr

Emission Limits (lb/hr, gr/dscf, lb/MMBtu, % opacity, etc.)
The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity
Emission Limit(s): 7 %
Authority for Requirement: Iowa DNR Construction Permit 93-A-165-S5
567 IAC 23.1"bbb", 40 CFR 60.672(a)(2)

Pollutant: PM_{10}
Emission Limit(s): 0.071 lb/hr(1)
Authority for Requirement: Iowa DNR Construction Permit 93-A-165-S5

Pollutant: Particulate Matter
Emission Limit(s): 0.05 grams/dscm, 0.022 gr/dscf, 0.071 lb/hr(1)
Authority for Requirement: Iowa DNR Construction Permit 93-A-165-S5
567 IAC 23.1"bbb", 40 CFR 60.672(a)(1)

(1) Standard is expressed as the average of 3 runs.

Emission Point Characteristics
This emission point shall conform to the specifications listed below.

Stack Height (ft., from the ground): 57
Stack Opening (inches, dia.): 6
Exhaust Temperature (^{o}F): 215
Exhaust Flowrate (scfm): 900
Downward Discharge Required: Yes ☒ No ☐
Authority for Requirement: Iowa DNR Construction Permit 93-A-165-S5

It shall be the owner's responsibility to ensure that construction conforms with the emission point characteristics stated above. If it is determined that any of the emission point characteristics are different than stated above, the owner must notify the Department and obtain a construction permit amendment, if required.

Periodic Monitoring Requirements
The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.

Opacity Monitoring
The facility shall check the opacity weekly during a period when the emission unit on this emission point is at or near full capacity and record the reading. Opacity shall be observed to ensure that no visible emissions occur during the material handling operation of the unit. If visible emissions are observed corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If corrective action does not return the observation to no visible emissions, then a Method 9 observation will be required. If an opacity greater than 7 % is observed, this would be a violation and corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake opacity readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits.

Weekly observations shall be conducted for a minimum of eight (8) consecutive weeks after permit issuance.
If no visible emissions are observed during this period then:
- Opacity observations shall be made once every other week for a duration of sixteen (16) weeks. If visible emissions are observed, monitoring reverts back to weekly.

If no visible emissions are observed during this period then:
- Observations shall be made once per month. If visible emissions are observed, monitoring reverts back to weekly.

If the source reverts back to weekly monitoring at any time, monitoring frequency will progress in an identical manner from the initial monitoring schedule.

Recordkeeping:
Maintain a written record of the observation and any action resulting from the observation. Records shall be maintained on-site for five (5) years and made available to representatives of the DNR upon request.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☒ No ☐

Facility operation and maintenance plans must be sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the applicable requirements.

Facility operation and maintenance plans are to be developed by the facility within six(6) months of the issuance date of this permit and the data pertaining to the plan maintained on site for at least 5 years. The plan and associated recordkeeping provides documentation of this facility's implementation of its obligation to operate according to good air pollution control practice.

Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with this emission point.

Authority for Requirement: 567 IAC 22.108(3)"b"

Emission Point ID Number: EP 65

Associated Equipment

Associated Emission Unit ID Number: EU 65

Applicable Requirements

Emission Unit vented through this Emission Point: EU 65
Emission Unit Description: Hydrocal Bulk Loading Drag Conveyor #2 (North)
Raw Material/Fuel: Hydrocal
Rated Capacity: 90 tons/hr

Emission Limits (lb/hr, gr/dscf, lb/MMBtu, % opacity, etc.)
The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity (fugitive)
Emission Limit(s): 10%
Authority for Requirement: Iowa DNR Construction Permit 03-A-119
567 IAC 23.1(2)"bbb", 40 CFR 60.672(b)

Periodic Monitoring Requirements
The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.

Opacity Monitoring
The facility shall check the opacity weekly during a period when the emission unit on this emission point is at or near full capacity and record the reading. Opacity shall be observed to ensure that no visible emissions occur during the material handling operation of the unit. If visible emissions are observed corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If corrective action does not return the observation to no visible emissions, then a Method 9 observation will be required. If an opacity greater than 10 % is observed, this would be a violation and corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake opacity readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits.

Weekly observations shall be conducted for a minimum of eight (8) consecutive weeks after permit issuance.
If no visible emissions are observed during this period then:

- Opacity observations shall be made once every other week for a duration of sixteen (16) weeks. If visible emissions are observed, monitoring reverts back to weekly.

If no visible emissions are observed during this period then:

- Observations shall be made once per month. If visible emissions are observed, monitoring reverts back to weekly.

If the source reverts back to weekly monitoring at any time, monitoring frequency will progress in an identical manner from the initial monitoring schedule.

Recordkeeping:
Maintain a written record of the observation and any action resulting from the observation. Records shall be maintained on-site for five (5) years and made available to representatives of the DNR upon request.

Stack Testing:

Pollutant - Opacity
Stack Test to be Completed by (date) – within sixty (60) days after achieving maximum production rate and no later than 180 days after the initial startup date.
Test Method – 40 CFR 60, Appendix A, Method 22
Authority for Requirement – Iowa DNR Construction Permit 03-A-119
40 CFR 60.675(c)
567 IAC 23.1(2)"bbb"

The owner of this equipment or the owner's authorized agent shall provide written notice to the Director, not less than 30 days before a required stack test or performance evaluation of a continuous emission monitor. Results of the test shall be submitted in writing to the Director in the form of a comprehensive report within 6 weeks of the completion of the testing. 567 IAC 25.1(7)

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)"b"

Emission Point ID Number: EP 66

Associated Equipment

Associated Emission Unit ID Number: EU 66

Applicable Requirements

Emission Unit vented through this Emission Point: EU 66
Emission Unit Description: Hydrocal C Base Boiler
Raw Material/Fuel: Natural Gas
Rated Capacity: 16.8 MMBtu/hr

Emission Limits (lb/hr, gr/dscf, lb/MMBtu, % opacity, etc.)
The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity
Emission Limit(s): 40 %[(1)]
Authority for Requirement: 567 IAC 23.3(2)"d" Iowa DNR Construction Permit 02-A-664

[(1)] Per DNR Air Quality Policy 3-b-08, Opacity Limits, an exceedance of the indicator opacity of 25% will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. The permit holder shall also file an "indicator opacity exceedance report" with the DNR field office and keep records as required in the policy. If exceedances continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: PM_{10}
Emission Limit(s): 0.24 lb/hr[(2)]
Authority for Requirement: Iowa DNR Construction Permit 02-A-664

Pollutant: Particulate Matter
Emission Limit(s): 0.6 lb/MMBtu, 0.24 lb/hr[(2)]
Authority for Requirement: 567 IAC 23.3(2)"b" Iowa DNR Construction Permit 02-A-664

Pollutant: Sulfur Dioxide (SO_2)
Emission Limit(s): 500 ppmv
Authority for Requirement: 567 IAC 23.3(3)"e" Iowa DNR Construction Permit 02-A-664

[(2)] Standard expressed as the average of 3 runs.

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Process Throughput:

A. This emission unit shall use natural gas only.
B. The owner or operator shall send a certification to the Department stating that this emission unit will burn only natural gas.

Recordkeeping

The following records shall be maintained on-site for five (5) years and available for inspection upon request by representatives of the Department of Natural Resources:

A. The amount of fuel used on a monthly basis.
B. A copy of all excess emission reports required for Subpart Dc. Per the reduced recordkeeping for Subpart Dc the facility may report excess emissions (or lack thereof) on an annual frequency. It should be noted that the facility is also required to orally notify the DNR field office of excess emissions within 8 hours and submit a written report within 7 days.

Authority for Requirement: 567 IAC 23.1(2)"lll", Iowa DNR Construction Permit 02-A-664, 40 CFR 60.48c(g)

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height (feet): 68
Stack Diameter (inches): 22
Stack Exhaust Flow Rate (scfm): 200
Stack Temperature (^{o}F): 370
Vertical, Obstructed Discharge Required: Yes ☒ No ☐
Authority for Requirement: Iowa DNR Construction Permit 02-A-664

It shall be the owner's responsibility to ensure that construction conforms with the emission point characteristics stated above. If it is determined that any of the emission point characteristics are different than stated above, the owner must notify the Department and obtain a construction permit amendment, if required.

Periodic Monitoring Requirements

The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)"b"

Emission Point ID Number: EP 67

Associated Equipment

Associated Emission Unit ID Number: EU 67

Applicable Requirements

Emission Unit vented through this Emission Point: EU 67
Emission Unit Description: Hydrocal C Base Tube Mill Burner
Raw Material/Fuel: Natural Gas
Rated Capacity: 3.75 MMBtu/hr

Emission Limits (lb/hr, gr/dscf, lb/MMBtu, % opacity, etc.)
The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity
Emission Limit(s): 40 %[(1)]
Authority for Requirement: 567 IAC 23.3(2)"d" Iowa DNR Construction Permit 02-A-682

[(1)] Per DNR Air Quality Policy 3-b-08, Opacity Limits, an exceedance of the indicator opacity of 10% will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. The permit holder shall also file an "indicator opacity exceedance report" with the DNR field office and keep records as required in the policy. If exceedances continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: PM_{10}
Emission Limit(s): 0.05 lb/hr[(2)]
Authority for Requirement: Iowa DNR Construction Permit 02-A-682

Pollutant: Particulate Matter
Emission Limit(s): 0.6 lb/MMBtu, 0.05 lb/hr[(2)]
Authority for Requirement: 567 IAC 23.3(2)"b" Iowa DNR Construction Permit 02-A-682

Pollutant: Sulfur Dioxide (SO_2)
Emission Limit(s): 500 ppmv
Authority for Requirement: 567 IAC 23.3(3)"e" Iowa DNR Construction Permit 02-A-682

[(2)] Standard is expressed as the average of 3 runs.

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Process Throughput:

A. This emission unit shall operate on natural gas only.

Authority for Requirement: Iowa DNR Construction Permit 02-A-682

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height (feet): 60
Stack Diameter (inches): 10
Stack Exhaust Flow Rate (scfm): 500
Stack Temperature (^{o}F): 300
Vertical, Unobstructed Discharge Required: Yes ☒ No ☐
Authority for Requirement: Iowa DNR Construction Permit 02-A-682

It shall be the owner's responsibility to ensure that construction conforms with the emission point characteristics stated above. If it is determined that any of the emission point characteristics are different than stated above, the owner must notify the Department and obtain a construction permit amendment, if required.

Periodic Monitoring Requirements

The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)"b"

Emission Point ID Number: EP 71

Associated Equipment

Associated Emission Unit ID Number: EU 71
Emissions Control Equipment ID Number: CE 71
Emissions Control Equipment Description: Baghouse

Applicable Requirements

Emission Unit vented through this Emission Point: EU 71
Emission Unit Description: #1 Board End Saw
Raw Material/Fuel: Wallboard
Rated Capacity: 0.0635 $MMft^3/hr$

Emission Limits (lb/hr, gr/dscf, lb/MMBtu, % opacity, etc.)
The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity
Emission Limit(s): 40 %(1)
Authority for Requirement: 567 IAC 23.3(2)"d" Iowa DNR Construction Permit 92-A-531-S1

(1) Per DNR Air Quality Policy 3-b-08, Opacity Limits, an exceedance of the indicator opacity of 10% will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. The permit holder shall also file an "indicator opacity exceedance report" with the DNR field office and keep records as required in the policy. If exceedances continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: PM_{10}
Emission Limit(s): 0.36 lb/hr(2)
Authority for Requirement: Iowa DNR Construction Permit 92-A-531-S1

Pollutant: Particulate Matter
Emission Limit(s): 0.1 gr/scf, 0.36 lb/hr(2)
Authority for Requirement: 567 IAC 23.3(2)"a" Iowa DNR Construction Permit 92-A-531-S1

(2) Standard is expressed as the average of 3 runs.

Emission Point Characteristics
The emission point shall conform to the specifications listed below.

Stack Height (feet): 55
Stack Diameter (inches): 10
Stack Exhaust Flow Rate (scfm): 1,800
Stack Temperature (^{o}F): 70
Vertical, Unobstructed Discharge Required: Yes ☒ No ☐
Authority for Requirement: Iowa DNR Construction Permit 92-A-531-S1

It shall be the owner's responsibility to ensure that construction conforms with the emission point characteristics stated above. If it is determined that any of the emission point characteristics are different than stated above, the owner must notify the Department and obtain a construction permit amendment, if required.

Periodic Monitoring Requirements
The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.

Stack Testing:

Pollutant - PM_{10}
Stack Test to be Completed by (date) - 2 years from permit issuance
Test Method - 40 CFR 51, Appendix M, 201A with 202 (1)
Authority for Requirement - 567 IAC 22.108(3)

Pollutant - Particulate Matter
Stack Test to be Completed by (date) - 2 years from permit issuance
Test Method - Iowa Compliance Sampling Manual Method 5
Authority for Requirement - 567 IAC 22.108(3)

Notes:
(1) Or approved alternative.

The owner of this equipment or the owner's authorized agent shall provide written notice to the Director, not less than 30 days before a required stack test or performance evaluation of a continuous emission monitor. Results of the test shall be submitted in writing to the Director in the form of a comprehensive report within 6 weeks of the completion of the testing. 567 IAC 25.1(7)

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☒ No ☐

Facility operation and maintenance plans must be sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the applicable requirements.

Facility operation and maintenance plans are to be developed by the facility within six(6) months of the issuance date of this permit and the data pertaining to the plan maintained on site for at least 5 years. The plan and associated recordkeeping provides documentation of this facility's implementation of its obligation to operate according to good air pollution control practice.

Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with this emission point.

Authority for Requirement: 567 IAC 22.108(3)"b"

Emission Point ID Number: EP 73

Associated Equipment

Associated Emission Unit ID Number: EU 73

Applicable Requirements

Emission Unit vented through this Emission Point: EU 73
Emission Unit Description: East Stucco Silo
Raw Material/Fuel: Stucco
Rated Capacity: 45 tons/hr

Emission Limits (lb/hr, gr/dscf, lb/MMBtu, % opacity, etc.)
The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity
Emission Limit(s): 40 %
Authority for Requirement: 567 IAC 23.3(2)"d"

Pollutant: Particulate Matter
Emission Limit(s): 0.1 gr/dscf
Authority for Requirement: 567 IAC 23.3(2)"a"

Operational Limits & Requirements
The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Work Practice Standards:
A. The east and west stucco silos, EP 73 and EP 74, shall not operate simultaneously.

Authority for Requirement: Iowa DNR Project Number 99-526 cover letter

Periodic Monitoring Requirements
The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)"b"

Emission Point ID Number: EP 74

Associated Equipment

Associated Emission Unit ID Number: EU 74

Applicable Requirements

Emission Unit vented through this Emission Point: EU 74
Emission Unit Description: West Stucco Silo
Raw Material/Fuel: Stucco
Rated Capacity: 45 tons/hr

Emission Limits (lb/hr, gr/dscf, lb/MMBtu, % opacity, etc.)
The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity
Emission Limit(s): 40 %
Authority for Requirement: 567 IAC 23.3(2)"d"

Pollutant: Particulate Matter
Emission Limit(s): 0.1 gr/dscf
Authority for Requirement: 567 IAC 23.3(2)"a"

Operational Limits & Requirements
The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Work Practice Standards:
A. The east and west stucco silos, EP 73 and EP 74, shall not operate simultaneously.

Authority for Requirement: Iowa DNR Project Number 99-526 cover letter

Periodic Monitoring Requirements
The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)"b"

Emission Point ID Number: EP 76

Associated Equipment

Associated Emission Unit ID Number: EU 76

Applicable Requirements

Emission Unit vented through this Emission Point: EU 76
Emission Unit Description: #1 Board Drying Kiln
Raw Material/Fuel: Wallboard, Natural Gas, Fuel Oil (backup)
Rated Capacity: 78 MMBtu/hr

Emission Limits (lb/hr, gr/dscf, lb/MMBtu, % opacity, etc.)
The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity
Emission Limit(s): 40 %[(1)]
Authority for Requirement: 567 IAC 23.3(2)"d" Iowa DNR Construction Permit 85-A-094-S4

[(1)] Per DNR Air Quality Policy 3-b-08, Opacity Limits, an exceedance of the indicator opacity of "no visible emissions" will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. The permit holder shall also file an "indicator opacity exceedance report" with the DNR field office and keep records as required in the policy. If exceedances continue after corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: PM_{10}
Emission Limit(s): 1.25 lb/hr[(2)]
Authority for Requirement: Iowa DNR Construction Permit 85-A-094-S4

Pollutant: Particulate Matter
Emission Limit(s): 0.6 lb/MMBtu, 1.25 lb/hr[(2)]
Authority for Requirement: 567 IAC 23.3(2)"b" Iowa DNR Construction Permit 85-A-094-S4

Pollutant: Sulfur Dioxide (SO_2)
Emission Limit(s): 2.5 lb/MMBtu (when burning fuel oil)
Authority for Requirement: 567 IAC 23.3(3)"b"

Pollutant: Sulfur Dioxide (SO_2)
Emission Limit(s): 500 ppmv (when burning natural gas)
Authority for Requirement: 567 IAC 23.3(3)"e" Iowa DNR Construction Permit 85-A-094-S4

[(2)] Standard is expressed as the average of 3 runs.

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Process throughput:

A. The emission unit shall operate on either natural gas or fuel oil.
B. The sulfur content of the fuel used shall not exceed 0.3% by weight.
C. The unit shall not operate more than 360 hours per rolling 12-months on fuel oil.

Reporting & Record keeping:

The following records shall be maintained on-site for five (5) years and available for inspection upon request by representatives of the Department of Natural Resources:

A. The fuel used and the sulfur content of the fuel.
B. Calculate the combined hours of operation on fuel oil on a rolling 12-month basis for each month of operation.

Authority for Requirement: Iowa DNR Construction Permit 85-A-094-S4

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height (feet): 30
Stack Opening (inches): 35 x 48
Stack Exhaust Flow Rate (scfm): 29,900
Stack Temperature (^{o}F): 250
Vertical, Unobstructed Discharge Required: Yes ☒ No ☐
Authority for Requirement: Iowa DNR Construction Permit 85-A-094-S4

It shall be the owner's responsibility to ensure that construction conforms with the emission point characteristics stated above. If it is determined that any of the emission point characteristics are different than stated above, the owner must notify the Department and obtain a construction permit amendment, if required.

Periodic Monitoring Requirements

The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)"b"

Emission Point ID Number: EP 78

Associated Equipment

Associated Emission Unit ID Number: EU 78
Emissions Control Equipment ID Number: CE 78
Emissions Control Equipment Description: Baghouse

Applicable Requirements

Emission Unit vented through this Emission Point: EU 78
Emission Unit Description: #1 Board PST & Mixer
Raw Material/Fuel: Stucco
Rated Capacity: 32 tons/hr

Emission Limits (lb/hr, gr/dscf, lb/MMBtu, % opacity, etc.)
The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity
Emission Limit(s): 40%(1)
Authority for Requirement: Iowa DNR Construction Permit 03-A-335
567 IAC 23.3(2)"d"

(1) Per DNR Air Quality Policy 3-b-08, Opacity Limits, an exceedance of the indicator opacity of (10%) will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. The permit holder shall also file an "indicator opacity exceedance report" with the DNR field office and keep records as required in the policy. If exceedances continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: Particulate Matter
Emission Limit(s): 0.1 gr/scf, 0.18 lb/hr(2)
Authority for Requirement: Iowa DNR Construction Permit 03-A-335
567 IAC 23.3(2)"a"

Pollutant: PM-10
Emission Limit(s): 0.18 lb/hr(2)
Authority for Requirement: Iowa DNR Construction Permit 03-A-335

(2) Standard is expressed as an average of 3 runs.

Emission Point Characteristics
The emission point shall conform to the specifications listed below.

Stack Height (feet): 22
Stack Diameter (inches): 8
Stack Exhaust Flow Rate (scfm): 950
Stack Temperature (^{o}F): 70
Horizontal Discharge Required: Yes ☒ No ☐
Authority for Requirement: Iowa DNR Construction Permit 03-A-335

It shall be the owner's responsibility to ensure that construction conforms with the emission point characteristics stated above. If it is determined that any of the emission point characteristics are different than stated above, the owner must notify the Department and obtain a construction permit amendment, if required.

Periodic Monitoring Requirements
The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☒ No ☐

Facility operation and maintenance plans must be sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the applicable requirements.

Facility operation and maintenance plans are to be developed by the facility within six(6) months of the issuance date of this permit and the data pertaining to the plan maintained on site for at least 5 years. The plan and associated recordkeeping provides documentation of this facility's implementation of its obligation to operate according to good air pollution control practice.

Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with this emission point.

Authority for Requirement: 567 IAC 22.108(3)"b"

Emission Point ID Number: EP 80

Associated Equipment
Associated Emission Unit ID Number: EU 80
Emissions Control Equipment ID Number: CE 80
Emissions Control Equipment Description: Baghouse (vents inside building)

Applicable Requirements

Emission Unit vented through this Emission Point: EU 80
Emission Unit Description: Board Cut Back Saw
Raw Material/Fuel: Wallboard
Rated Capacity: 24 lb/hr

Emission Limits (lb/hr, gr/dscf, lb/MMBtu, % opacity, etc.)
The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Fugitive Dust
Emission Limit: No person shall allow, cause or permit any materials to be handled, transported or stored; or a building, its appurtenances or a construction haul road to be used, constructed, altered, repaired or demolished, without taking reasonable precautions to prevent a nuisance. All persons shall take reasonable precautions to prevent the discharge of visible emissions of fugitive dusts beyond the lot line of the property on which the emissions originate.

Authority for Requirement: 567 IAC 23.3(2)"c"

Periodic Monitoring Requirements
The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)"b"

Emission Point ID Number: EP 82

Associated Equipment

Associated Emission Unit ID Number: EU 82
Emissions Control Equipment ID Number: CE 82
Emissions Control Equipment Description: Baghouse

Applicable Requirements

Emission Unit vented through this Emission Point: EU 82
Emission Unit Description: #1 Board HRA Ball Mill
Raw Material/Fuel: Sucrose/Landplaster
Rated Capacity: 0.4 tons/hr

Emission Limits (lb/hr, gr/dscf, lb/MMBtu, % opacity, etc.)
The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity
Emission Limit(s): 40% (1)
Authority for Requirement: 567 IAC 23.3(2)"d" Iowa DNR Construction Permit 99-A-644-S1

(1) Per DNR Air Quality Policy 3-b-08, Opacity Limits, an exceedence of the indicator opacity of no visible emissions will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedence. The permit holder shall also file an "indicator opacity exceedence report" with the DNR field office and keep records as required in the policy. If exceedences continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: PM_{10}
Emission Limit(s): 0.03 lb/hr(2)
Authority for Requirement: Iowa DNR Construction Permit 99-A-644-S1

Pollutant: Particulate Matter
Emission Limit(s): 0.1 gr/scf, 0.03 lb/hr(2)
Authority for Requirement: 567 IAC 23.3(2)"a" Iowa DNR Construction Permit 99-A-644-S1

(2) Standard is expressed as the average of 3 runs.

Emission Point Characteristics
The source shall be connected to the stack designated below.

Stack Height: 8' 6"
Stack Diameter (inches): 4
Stack Exhaust Flow Rate (scfm): 400
Stack Temperature (^{o}F): 150
Downward Discharge Required: Yes ☒ No ☐
Authority for Requirement: Iowa DNR Construction Permit 99-A-644-S1

It shall be the owner's responsibility to ensure that construction conforms with the emission point characteristics stated above. If it is determined that any of the emission point characteristics are different than stated above, the owner must notify the Department and obtain a construction permit amendment, if required.

Periodic Monitoring Requirements
The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☒ No ☐

Facility operation and maintenance plans must be sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the applicable requirements.

Facility operation and maintenance plans are to be developed by the facility within six(6) months of the issuance date of this permit and the data pertaining to the plan maintained on site for at least 5 years. The plan and associated recordkeeping provides documentation of this facility's implementation of its obligation to operate according to good air pollution control practice.

Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with this emission point.

Authority for Requirement: 567 IAC 22.108(3)"b"

Emission Point ID Number: EP 83

Associated Equipment
Associated Emission Unit ID Number: EU 83
Emissions Control Equipment ID Number: CE 83
Emissions Control Equipment Description: Baghouse (vents inside building)

Applicable Requirements

Emission Unit vented through this Emission Point: EU 83
Emission Unit Description: #1 Board HRA Landplaster Storage Bin
Raw Material/Fuel: Landplaster
Rated Capacity: 1 ton/hr

Emission Limits (lb/hr, gr/dscf, lb/MMBtu, % opacity, etc.)
The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Fugitive Dust
Emission Limit: No person shall allow, cause or permit any materials to be handled, transported or stored; or a building, its appurtenances or a construction haul road to be used, constructed, altered, repaired or demolished, without taking reasonable precautions to prevent a nuisance. All persons shall take reasonable precautions to prevent the discharge of visible emissions of fugitive dusts beyond the lot line of the property on which the emissions originate.

Authority for Requirement: 567 IAC 23.3(2)"c"

Periodic Monitoring Requirements
The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)"b"

Emission Point ID Number: EP 91

Associated Equipment

Associated Emission Unit ID Number: EU 91
Emissions Control Equipment ID Number: CE 91
Emissions Control Equipment Description: Baghouse (vents inside building)

Applicable Requirements

Emission Unit vented through this Emission Point: EU 91
Emission Unit Description: Ready Mix Carbonate Supply Bin
Raw Material/Fuel: Calcium Carbonate
Rated Capacity: 7 tons/hr

Emission Limits (lb/hr, gr/dscf, lb/MMBtu, % opacity, etc.)
The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Fugitive Dust
Emission Limit: No person shall allow, cause or permit any materials to be handled, transported or stored; or a building, its appurtenances or a construction haul road to be used, constructed, altered, repaired or demolished, without taking reasonable precautions to prevent a nuisance. All persons shall take reasonable precautions to prevent the discharge of visible emissions of fugitive dusts beyond the lot line of the property on which the emissions originate.

Authority for Requirement: 567 IAC 23.3(2)"c"

Periodic Monitoring Requirements
The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)"b"

Emission Point ID Number: EP 92

Associated Equipment

Associated Emission Unit ID Number: EU 92
Emissions Control Equipment ID Number: CE 92
Emissions Control Equipment Description: Baghouse

Applicable Requirements

Emission Unit vented through this Emission Point: See table below
Emission Unit Description: Ready Mix Mixer Feed Bin
Raw Material/Fuel: Dry Additives
Rated Capacity: See table below

The following emission units vent to the baghouse connected to this emission point:

Emission Unit Description	Maximum Capacity
Mixer Supply Bin (EU 92A)	8.3 tons/hr
Cam Belt (EU 92B)	8.3 tons/hr
Carbonate Weigh Hopper (EU 92C)	8.3 tons/hr

Authority for Requirement: Iowa DNR Construction Permit 02-A-685-S1

Emission Limits (lb/hr, gr/dscf, lb/MMBtu, % opacity, etc.)
The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity
Emission Limit(s): No Visible Emissions(1)
Authority for Requirement: Iowa DNR Construction Permit 02-A-685-S1
567 IAC 23.3(2)"d"

(1) If visible emissions are observed other than startup, shutdown, or malfunction a stack test may be required to demonstrate compliance with the particulate standard.

Pollutant: PM_{10}
Emission Limit(s): 0.38 lb/hr(2)
Authority for Requirement: Iowa DNR Construction Permit 02-A-685-S1

Pollutant: Particulate Matter
Emission Limit(s): 0.1 gr./dscf, 0.38 lb/hr(2)
Authority for Requirement: Iowa DNR Construction Permit 02-A-685-S1
567 IAC 23.3(2)"a"

(2) Standard expressed as the average of 3 runs.

Emission Point Characteristics
The emission point shall conform to the specifications listed below.

Stack Height (feet): 33
Stack Opening (inches): 10 x 14
Stack Exhaust Flow Rate (scfm): 2,000
Stack Temperature (^{o}F): 70
Vertical, Unobstructed Discharge Required: Yes ☒ No ☐
Authority for Requirement: Iowa DNR Construction Permit 02-A-685-S1

It shall be the owner's responsibility to ensure that construction conforms with the emission point characteristics stated above. If it is determined that any of the emission point characteristics are different than stated above, the owner must notify the Department and obtain a construction permit amendment, if required.

Periodic Monitoring Requirements
The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.

Opacity Monitoring
Opacity shall be observed on a weekly basis to ensure no visible emissions during the material handling operation of the unit. If visible emissions are observed, this would be a violation and corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake opacity readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits.

Weekly observations shall be conducted for a minimum of eight (8) consecutive weeks after permit issuance.
If no visible emissions are observed during this period then:
- Opacity observations shall be made once every other week for a duration of sixteen (16) weeks. If visible emissions are observed, monitoring reverts back to weekly.

If no visible emissions are observed during this period then:
- Observations shall be made once per month. If visible emissions are observed, monitoring reverts back to weekly.

If the source reverts back to weekly monitoring at any time, monitoring frequency will progress in an identical manner from the initial monitoring schedule.

Recordkeeping:
Maintain a written record of the observation and any action resulting from the observation. Records shall be maintained on-site for five (5) years and made available to representatives of the DNR upon request.

Stack Testing:

Pollutant - Opacity

Stack Test to be Completed by (date) - within sixty (60) days after achieving maximum production rate and no later than one hundred eighty (180) days after the initial startup date

Test Method – 40 CFR 60, Appendix A, Method 9

Authority for Requirement – Iowa DNR Construction Permit 02-A-685-S1[(1)]

Notes:

[(1)] Minimum Test Run Time = 1 hour

The owner of this equipment or the owner's authorized agent shall provide written notice to the Director, not less than 30 days before a required stack test or performance evaluation of a continuous emission monitor. Results of the test shall be submitted in writing to the Director in the form of a comprehensive report within 6 weeks of the completion of the testing. 567 IAC 25.1(7)

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☒ No ☐

Facility operation and maintenance plans must be sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the applicable requirements.

Facility operation and maintenance plans are to be developed by the facility within six(6) months of the issuance date of this permit and the data pertaining to the plan maintained on site for at least 5 years. The plan and associated recordkeeping provides documentation of this facility's implementation of its obligation to operate according to good air pollution control practice.

Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with this emission point.

Authority for Requirement: 567 IAC 22.108(3)"b"

Emission Point ID Number: EP 93

Associated Equipment

Associated Emission Unit ID Number: EU 93
Emissions Control Equipment ID Number: CE 93
Emissions Control Equipment Description: Baghouse

Applicable Requirements

Emission Unit vented through this Emission Point: EU 93
Emission Unit Description: Ready Mix Bag Dump Station
Raw Material/Fuel: Ready Mix
Rated Capacity: 1 ton/hr

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)
The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity
Emission Limit(s): No Visible Emissions(1)
Authority for Requirement: Iowa DNR Construction Permit 02-A-686-S1
567 IAC 23.3(2)"d"

(1) If visible emissions are observed other than startup, shutdown, or malfunction a stack test may be required to demonstrate compliance with the particulate standard.

Pollutant: PM_{10}
Emission Limit(s): 0.28 lb/hr(2)
Authority for Requirement: Iowa DNR Construction Permit 02-A-686-S1

Pollutant: Particulate Matter
Emission Limit(s): 0.1 gr./dscf, 0.28 lb/hr(2)
Authority for Requirement: Iowa DNR Construction Permit 02-A-686-S1
567 IAC 23.3(2)"a"

(2) Standard expressed as the average of 3 runs.

Emission Point Characteristics
The emission point shall conform to the specifications listed below.

Stack Height (feet): 33
Stack Diameter (inches): 6
Stack Exhaust Flow Rate (scfm): 1,500
Stack Temperature (^{o}F): 70
Vertical, Unobstructed Discharge Required: Yes ☒ No ☐
Authority for Requirement: Iowa DNR Construction Permit 02-A-686-S1

It shall be the owner's responsibility to ensure that construction conforms with the emission point characteristics stated above. If it is determined that any of the emission point characteristics are different than stated above, the owner must notify the Department and obtain a construction permit amendment, if required.

Periodic Monitoring Requirements
The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.

Opacity Monitoring
Opacity shall be observed on a weekly basis to ensure no visible emissions during the material handling operation of the unit. If visible emissions are observed, this would be a violation and corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake opacity readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits.

Weekly observations shall be conducted for a minimum of eight (8) consecutive weeks after permit issuance.
If no visible emissions are observed during this period then:
- Opacity observations shall be made once every other week for a duration of sixteen (16) weeks. If visible emissions are observed, monitoring reverts back to weekly.

If no visible emissions are observed during this period then:
- Observations shall be made once per month. If visible emissions are observed, monitoring reverts back to weekly.

If the source reverts back to weekly monitoring at any time, monitoring frequency will progress in an identical manner from the initial monitoring schedule.

Recordkeeping:
Maintain a written record of the observation and any action resulting from the observation. Records shall be maintained on-site for five (5) years and made available to representatives of the DNR upon request.

Stack Testing:

Pollutant - Opacity

Stack Test to be Completed by (date) - within sixty (60) days after achieving maximum production rate and no later than one hundred eighty (180) days after the initial startup date

Test Method – 40 CFR 60, Appendix A, Method 9

Authority for Requirement – Iowa DNR Construction Permit 02-A-686-S1[(1)]

Notes:

[(1)] Minimum Test Run Time = 1 hour

The owner of this equipment or the owner's authorized agent shall provide written notice to the Director, not less than 30 days before a required stack test or performance evaluation of a continuous emission monitor. Results of the test shall be submitted in writing to the Director in the form of a comprehensive report within 6 weeks of the completion of the testing. 567 IAC 25.1(7)

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☒ No ☐

Facility operation and maintenance plans must be sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the applicable requirements.

Facility operation and maintenance plans are to be developed by the facility within six(6) months of the issuance date of this permit and the data pertaining to the plan maintained on site for at least 5 years. The plan and associated recordkeeping provides documentation of this facility's implementation of its obligation to operate according to good air pollution control practice.

Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with this emission point.

Authority for Requirement: 567 IAC 22.108(3)"b"

Emission Point ID Number: EP 100

Associated Equipment

Associated Emission Unit ID Number: EU 100

Applicable Requirements

Emission Unit vented through this Emission Point: EU 100
Emission Unit Description: Stockpile - North
Raw Material/Fuel: Rock
Rated Capacity: 0.8 Acres

Emission Limits (lb/hr, gr/dscf, lb/MMBtu, % opacity, etc.)
The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Fugitive Dust
Emission Limit: No person shall allow, cause or permit any materials to be handled, transported or stored; or a building, its appurtenances or a construction haul road to be used, constructed, altered, repaired or demolished, without taking reasonable precautions to prevent a nuisance. All persons shall take reasonable precautions to prevent the discharge of visible emissions of fugitive dusts beyond the lot line of the property on which the emissions originate.
Authority for Requirement: 567 IAC 23.3(2)"c"

Periodic Monitoring Requirements
The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)"b"

Emission Point ID Number: EP 101

Associated Equipment

Associated Emission Unit ID Number: EU 101

Applicable Requirements

Emission Unit vented through this Emission Point: EU 101
Emission Unit Description: Stockpile - South
Raw Material/Fuel: Rock
Rated Capacity: 0.31 Acres

Emission Limits (lb/hr, gr/dscf, lb/MMBtu, % opacity, etc.)
The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Fugitive Dust
Emission Limit: No person shall allow, cause or permit any materials to be handled, transported or stored; or a building, its appurtenances or a construction haul road to be used, constructed, altered, repaired or demolished, without taking reasonable precautions to prevent a nuisance. All persons shall take reasonable precautions to prevent the discharge of visible emissions of fugitive dusts beyond the lot line of the property on which the emissions originate.

Authority for Requirement: 567 IAC 23.3(2)"c"

Periodic Monitoring Requirements
The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)"b"

Emission Point ID Number: EP 118

Associated Equipment

Associated Emission Unit ID Number: EU 118

Applicable Requirements

Emission Unit vented through this Emission Point: EU 118
Emission Unit Description: Mill Loadout
Raw Material/Fuel: Stucco
Rated Capacity: 25 tons/hr

Emission Limits (lb/hr, gr/dscf, lb/MMBtu, % opacity, etc.)
The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Fugitive Dust
Emission Limit: No person shall allow, cause or permit any materials to be handled, transported or stored; or a building, its appurtenances or a construction haul road to be used, constructed, altered, repaired or demolished, without taking reasonable precautions to prevent a nuisance. All persons shall take reasonable precautions to prevent the discharge of visible emissions of fugitive dusts beyond the lot line of the property on which the emissions originate.

Authority for Requirement: 567 IAC 23.3(2)"c"

Periodic Monitoring Requirements
The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)"b"

Emission Point ID Number: EP 122B

Associated Equipment

Associated Emission Unit ID Number: EU 122B

Applicable Requirements

Emission Unit vented through this Emission Point: EU 122B
Emission Unit Description: Bagging Fugitives
Raw Material/Fuel: Stucco
Rated Capacity: 75 tons/hr

Emission Limits (lb/hr, gr/dscf, lb/MMBtu, % opacity, etc.)
The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Fugitive Dust
Emission Limit: No person shall allow, cause or permit any materials to be handled, transported or stored; or a building, its appurtenances or a construction haul road to be used, constructed, altered, repaired or demolished, without taking reasonable precautions to prevent a nuisance. All persons shall take reasonable precautions to prevent the discharge of visible emissions of fugitive dusts beyond the lot line of the property on which the emissions originate.

Authority for Requirement: 567 IAC 23.3(2)"c"

Periodic Monitoring Requirements
The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)"b"

Emission Point ID Number: EP 125B

Associated Equipment

Associated Emission Unit ID Number: EU 125B

Applicable Requirements

Emission Unit vented through this Emission Point: EU 125B
Emission Unit Description: Board Mixing Fugitives
Raw Material/Fuel: Dry Additives
Rated Capacity: 45 tons/hr

Emission Limits (lb/hr, gr/dscf, lb/MMBtu, % opacity, etc.)
The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Fugitive Dust
Emission Limit: No person shall allow, cause or permit any materials to be handled, transported or stored; or a building, its appurtenances or a construction haul road to be used, constructed, altered, repaired or demolished, without taking reasonable precautions to prevent a nuisance. All persons shall take reasonable precautions to prevent the discharge of visible emissions of fugitive dusts beyond the lot line of the property on which the emissions originate.

Authority for Requirement: 567 IAC 23.3(2)"c"

Periodic Monitoring Requirements
The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)"b"

Emission Point ID Number: EP 125C

Associated Equipment

Associated Emission Unit ID Number: EU 125C

Applicable Requirements

Emission Unit vented through this Emission Point: EU 125C
Emission Unit Description: #1 Board PST Fugitives
Raw Material/Fuel: Dry Additives
Rated Capacity: 26 tons/hr

Emission Limits (lb/hr, gr/dscf, lb/MMBtu, % opacity, etc.)
The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Fugitive Dust
Emission Limit: No person shall allow, cause or permit any materials to be handled, transported or stored; or a building, its appurtenances or a construction haul road to be used, constructed, altered, repaired or demolished, without taking reasonable precautions to prevent a nuisance. All persons shall take reasonable precautions to prevent the discharge of visible emissions of fugitive dusts beyond the lot line of the property on which the emissions originate.

Authority for Requirement: 567 IAC 23.3(2)"c"

Periodic Monitoring Requirements
The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)"b"

Emission Point ID Number: EP 128

Associated Equipment

Associated Emission Unit ID Number: EU 128

Applicable Requirements

Emission Unit vented through this Emission Point: EU 128
Emission Unit Description: Stucco Transfer
Raw Material/Fuel: Stucco
Rated Capacity: 45 tons/hr

Emission Limits (lb/hr, gr/dscf, lb/MMBtu, % opacity, etc.)
The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Fugitive Dust
Emission Limit: No person shall allow, cause or permit any materials to be handled, transported or stored; or a building, its appurtenances or a construction haul road to be used, constructed, altered, repaired or demolished, without taking reasonable precautions to prevent a nuisance. All persons shall take reasonable precautions to prevent the discharge of visible emissions of fugitive dusts beyond the lot line of the property on which the emissions originate.

Authority for Requirement: 567 IAC 23.3(2)"c"

Periodic Monitoring Requirements
The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)"b"

Emission Point ID Number: EP 132

Associated Equipment

Associated Emission Unit ID Number: EU 132

Applicable Requirements

Emission Unit vented through this Emission Point: EU 132
Emission Unit Description: Stockpile - West
Raw Material/Fuel: Crushed Rock
Rated Capacity: 0.72 acres

Emission Limits (lb/hr, gr/dscf, lb/MMBtu, % opacity, etc.)
The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Fugitive Dust
Emission Limit: No person shall allow, cause or permit any materials to be handled, transported or stored; or a building, its appurtenances or a construction haul road to be used, constructed, altered, repaired or demolished, without taking reasonable precautions to prevent a nuisance. All persons shall take reasonable precautions to prevent the discharge of visible emissions of fugitive dusts beyond the lot line of the property on which the emissions originate.

Authority for Requirement: 567 IAC 23.3(2)"c"

Periodic Monitoring Requirements
The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)"b"

Emission Point ID Number: EP 140

Associated Equipment

Associated Emission Unit ID Number: EU 140

Applicable Requirements

Emission Unit vented through this Emission Point: EU 140
Emission Unit Description: Rock Loading Traffic
Raw Material/Fuel: Gravel Road
Rated Capacity: 8.05 VMT/hr

Emission Limits (lb/hr, gr/dscf, lb/MMBtu, % opacity, etc.)
The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Fugitive Dust
Emission Limit: No person shall allow, cause or permit any materials to be handled, transported or stored; or a building, its appurtenances or a construction haul road to be used, constructed, altered, repaired or demolished, without taking reasonable precautions to prevent a nuisance. All persons shall take reasonable precautions to prevent the discharge of visible emissions of fugitive dusts beyond the lot line of the property on which the emissions originate.

Authority for Requirement: 567 IAC 23.3(2)"c"

Periodic Monitoring Requirements
The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)"b"

Emission Point ID Number: EP 141

Associated Equipment

Associated Emission Unit ID Number: EU 141

Applicable Requirements

Emission Unit vented through this Emission Point: EU 141
Emission Unit Description: Umthun Haul Road
Raw Material/Fuel: Gravel Road
Rated Capacity: 5.39 VMT/hr

Emission Limits (lb/hr, gr/dscf, lb/MMBtu, % opacity, etc.)
The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Fugitive Dust
Emission Limit: No person shall allow, cause or permit any materials to be handled, transported or stored; or a building, its appurtenances or a construction haul road to be used, constructed, altered, repaired or demolished, without taking reasonable precautions to prevent a nuisance. All persons shall take reasonable precautions to prevent the discharge of visible emissions of fugitive dusts beyond the lot line of the property on which the emissions originate.

Authority for Requirement: 567 IAC 23.3(2)"c"

Periodic Monitoring Requirements
The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)"b"

Emission Point ID Number: EP 150

Associated Equipment

Associated Emission Unit ID Number: EU 150

Applicable Requirements

Emission Unit vented through this Emission Point: EU 150
Emission Unit Description: Soap
Raw Material/Fuel: Soap
Rated Capacity: 15.98 lb/hr

Emission Limits (lb/hr, gr/dscf, lb/MMBtu, % opacity, etc.)
The emissions from this emission point shall not exceed the levels specified below.

No emission limits at this time.

Periodic Monitoring Requirements
The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)"b"

Emission Point ID Number: EP 151

Associated Equipment

Associated Emission Unit ID Number: EU 151

Applicable Requirements

Emission Unit vented through this Emission Point: EU 151
Emission Unit Description: Ink Usage
Raw Material/Fuel: Ink
Rated Capacity: 0.46 lb/hr

Emission Limits (lb/hr, gr/dscf, lb/MMBtu, % opacity, etc.)
The emissions from this emission point shall not exceed the levels specified below.

No applicable emission limits at this time.

Periodic Monitoring Requirements
The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)"b"

Emission Point ID Number: EP 152

Associated Equipment

Associated Emission Unit ID Number: EU 152

Applicable Requirements

Emission Unit vented through this Emission Point: EU 152
Emission Unit Description: Latex
Raw Material/Fuel: Latex
Rated Capacity: 913.24 lb/hr

Emission Limits (lb/hr, gr/dscf, lb/MMBtu, % opacity, etc.)
The emissions from this emission point shall not exceed the levels specified below.

No applicable emission limits at this time.

Periodic Monitoring Requirements
The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)"b"

Emission Point ID Number: EP 160

Associated Equipment

Associated Emission Unit ID Number: EP 160

Applicable Requirements

Emission Unit vented through this Emission Point: EU 160
Emission Unit Description: Emergency Generator
Raw Material/Fuel: Natural Gas
Rated Capacity: 0.51 MMBtu/hr

Emission Limits (lb/hr, gr/dscf, lb/MMBtu, % opacity, etc.)
The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity
Emission Limit(s): 40 %
Authority for Requirement: 567 IAC 23.3(2)"d"

Pollutant: Particulate Matter
Emission Limit(s): 0.6 lb/MMBtu
Authority for Requirement: 567 IAC 23.3(2)"b"

Pollutant: Sulfur Dioxide (SO_2)
Emission Limit(s): 500 ppmv
Authority for Requirement: 567 IAC 23.3(3)"e"

Periodic Monitoring Requirements
The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)"b"

Emission Point ID Number: EP 181

Associated Equipment

Associated Emission Unit ID Number: EU 181

Applicable Requirements

Emission Unit vented through this Emission Point: EU 181
Emission Unit Description: Conveyor - Stucco
Raw Material/Fuel: Stucco
Rated Capacity: 0.4 Acres

Emission Limits (lb/hr, gr/dscf, lb/MMBtu, % opacity, etc.)
The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Fugitive Dust
Emission Limit: No person shall allow, cause or permit any materials to be handled, transported or stored; or a building, its appurtenances or a construction haul road to be used, constructed, altered, repaired or demolished, without taking reasonable precautions to prevent a nuisance. All persons shall take reasonable precautions to prevent the discharge of visible emissions of fugitive dusts beyond the lot line of the property on which the emissions originate.

Authority for Requirement: 567 IAC 23.3(2)"c"

Periodic Monitoring Requirements
The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)"b"

Emission Point ID Numbers: EP 302, EP 303, EP 305, EP 307, EP 311

Associated Equipment

Associated Emission Unit ID Numbers: EU 302, EU 303, EU 305, EU 306, EU 07, EU 311

Applicable Requirements

EP= Emission Point *EU= Emission Unit*

EP	EU	EU Description	Raw Material	Rated Capacity
EP 302	EU 302	Primary Crusher-Quarry	Gypsum	800 tons/hr
EP 303	EU 303	Belt Conveyor-Quarry	Gypsum	800 tons/hr
EP 305	EU 305	Belt Conveyor-Quarry	Gypsum	800 tons/hr
EP 307	EU 307	Truck Loading-Quarry	Gypsum	600 tons/hr
EP 311	EU 311	Belt Conveyor-Plant	Gypsum	600 tons/hr

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from these emission points shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit(s): No owner or operator shall cause to be discharged into the atmosphere from:

(c) Any transfer points on the above listed equipment not enclosed in a building any fugitive emissions which exhibit greater than 10 percent opacity, except for (b).

(d) Any crushers not enclosed in a building any fugitive emissions which exhibit greater than 15 percent opacity.

(e) Any building enclosing any of the above listed affected facilities any visible fugitive emissions except emissions from a vent as defined in § 60.671 of 40 CFR.

(f) Any vent of any building enclosing any of the above listed affected facilities emissions which exceed:

- Particulate matter in excess of 0.05 grams/dscm (0.02 grains/dscf).
- Opacity greater than 7 %.

Authority for Requirement: Iowa DNR Construction Permit 00-A-848-S1
567 IAC 23.1(2)"bbb", 40 CFR 60.672(b), (c), (d), (e)(1), (e)(2)

Periodic Monitoring Requirements

The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.

Opacity Monitoring:

The facility shall check the opacity weekly during a period when the emission unit on this emission point is at or near full capacity and record the reading. Opacity shall be observed to ensure that no visible emissions occur during the material handling operation of the unit. If visible emissions are observed corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If corrective action does not return the observation to no visible emissions, then a Method 9 observation will be required. If opacities greater than the opacity limits listed on the previous page are observed, this would be a violation and corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake opacity readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits.

Weekly observations shall be conducted for a minimum of eight (8) consecutive weeks after permit issuance.

If no visible emissions are observed during this period then:

- Opacity observations shall be made once every other week for a duration of sixteen (16) weeks. If visible emissions are observed, monitoring reverts back to weekly.

If no visible emissions are observed during this period then:

- Observations shall be made once per month. If visible emissions are observed, monitoring reverts back to weekly.

If the source reverts back to weekly monitoring at any time, monitoring frequency will progress in an identical manner from the initial monitoring schedule.

Recordkeeping:

Maintain a written record of the observation and any action resulting from the observation. Records shall be maintained on-site for five (5) years and made available to representatives of the DNR upon request.

Stack Testing:

Pollutant - Opacity

Stack Test to be Completed by (date) – within sixty (60) days after achieving maximum production rate and no later than 180 days after the initial startup date.

Test Method – 40 CFR 60, Appendix A, Method 22

Authority for Requirement – Iowa DNR Construction Permit 00-A-848-S1
40 CFR 60.675(d)
567 IAC 23.1(2)"bbb"

The owner of this equipment or the owner's authorized agent shall provide written notice to the Director, not less than 30 days before a required stack test or performance evaluation of a continuous emission monitor. Results of the test shall be submitted in writing to the Director in the form of a comprehensive report within 6 weeks of the completion of the testing. 567 IAC 25.1(7)

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)"b"

Emission Point ID Numbers: EP 304, EP 308

Associated Equipment

Associated Emission Unit ID Numbers: EU 304, EU 308

Applicable Requirements

EP= Emission Point *EU= Emission Unit*

EP	EU	EU Description	Raw Material	Rated Capacity
EP 304	EU 304	Stockpile-Quarry	Gypsum	800 tons/hr
EP 308	EU 308	Haul Road-Quarry	Gypsum	30 VMT/hr

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Fugitive Dust
Emission Limit: No person shall allow, cause or permit any materials to be handled, transported or stored; or a building, its appurtenances or a construction haul road to be used, constructed, altered, repaired or demolished, without taking reasonable precautions to prevent a nuisance. All persons shall take reasonable precautions to prevent the discharge of visible emissions of fugitive dusts beyond the lot line of the property on which the emissions originate.

Authority for Requirement: 567 IAC 23.3(2)"c"

Periodic Monitoring Requirements

The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)"b"

Emission Point ID Number: EP 401

Associated Equipment

Associated Emission Unit ID Number: EU 401
Emissions Control Equipment ID Number: CE 401
Emissions Control Equipment Description: Baghouse

Applicable Requirements

Emission Unit vented through this Emission Point: EU 401
Emission Unit Description: Hydrocal Finish Bulk A-Base Supply Bin
Raw Material/Fuel: Calcined Gypsum
Rated Capacity: 70 tons/hr

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)
The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity
Emission Limit(s): 7 %
Authority for Requirement: Iowa DNR Construction Permit 01-A-698
567 IAC 23.1(2)"bbb", 40 CFR 60.672(a)(2)

Pollutant: PM_{10}
Emission Limit(s): 0.74 lb/hr
Authority for Requirement: Iowa DNR Construction Permit 01-A-698

Pollutant: Particulate Matter
Emission Limit(s): 0.022 gr/dscf (0.05 grams/dscm)
Authority for Requirement: Iowa DNR Construction Permit 01-A-698
567 IAC 23.1(2)"bbb", 40 CFR 60.672(a)(1)

Emission Point Characteristics
The emission point shall conform to the specifications listed below.

Stack Height (feet): 113' 6"
Stack Diameter (inches): 14
Stack Exhaust Flow Rate (scfm): 3,900
Stack Temperature (^{o}F): 70
Vertical, Unobstructed Discharge Required: Yes ☒ No ☐
Authority for Requirement: Iowa DNR Construction Permit 01-A-698

It shall be the owner's responsibility to ensure that construction conforms with the emission point characteristics stated above. If it is determined that any of the emission point characteristics are different than stated above, the owner must notify the Department and obtain a construction permit amendment, if required.

Periodic Monitoring Requirements
The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.

Opacity Monitoring
The facility shall check the opacity weekly during a period when the emission unit on this emission point is at or near full capacity and record the reading. Opacity shall be observed to ensure that no visible emissions occur during the material handling operation of the unit. If visible emissions are observed corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If corrective action does not return the observation to no visible emissions, then a Method 9 observation will be required. If an opacity greater than 7 % is observed, this would be a violation and corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake opacity readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits.

Weekly observations shall be conducted for a minimum of eight (8) consecutive weeks after permit issuance.
If no visible emissions are observed during this period then:
- Opacity observations shall be made once every other week for a duration of sixteen (16) weeks. If visible emissions are observed, monitoring reverts back to weekly.

If no visible emissions are observed during this period then:
- Observations shall be made once per month. If visible emissions are observed, monitoring reverts back to weekly.

If the source reverts back to weekly monitoring at any time, monitoring frequency will progress in an identical manner from the initial monitoring schedule.

Recordkeeping:
Maintain a written record of the observation and any action resulting from the observation. Records shall be maintained on-site for five (5) years and made available to representatives of the DNR upon request.

Stack Testing:

Pollutant – PM_{10}
Stack Test to be Completed by (date) - within sixty (60) days after achieving maximum production rate and no later than one hundred eighty (180) days after the initial startup date
Test Method – 40 CFR 51, Appendix M, 201A with 202[(1)]
Authority for Requirement – Iowa DNR Construction Permit 01-A-698[(2)]

Pollutant – Particulate Matter
Stack Test to be Completed by (date) - within sixty (60) days after achieving maximum production rate and no later than one hundred eighty (180) days after the initial startup date
Test Method – 40 CFR 60, Appendix A, Method 5
Authority for Requirement – Iowa DNR Construction Permit 01-A-698

Pollutant - Opacity
Stack Test to be Completed by (date) - within sixty (60) days after achieving maximum production rate and no later than one hundred eighty (180) days after the initial startup date
Test Method – 40 CFR 60, Appendix A, Method 9
Authority for Requirement – Iowa DNR Construction Permit 01-A-698

Notes:
(1) Or approved alternative
(2) This test may be waived by the Department if EP 402 demonstrates compliance with the PM_{10} allowable.

The owner of this equipment or the owner's authorized agent shall provide written notice to the Director, not less than 30 days before a required stack test or performance evaluation of a continuous emission monitor. Results of the test shall be submitted in writing to the Director in the form of a comprehensive report within 6 weeks of the completion of the testing. 567 IAC 25.1(7)

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☒ No ☐

Facility operation and maintenance plans must be sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the applicable requirements.

Facility operation and maintenance plans are to be developed by the facility within six(6) months of the issuance date of this permit and the data pertaining to the plan maintained on site for at least 5 years. The plan and associated recordkeeping provides documentation of this facility's implementation of its obligation to operate according to good air pollution control practice.

Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with this emission point.

Authority for Requirement: 567 IAC 22.108(3)"b"

Emission Point ID Number: EP 402

Associated Equipment

Associated Emission Unit ID Number: EU 402
Emissions Control Equipment ID Number: CE 402
Emissions Control Equipment Description: Baghouse

Applicable Requirements

Emission Unit vented through this Emission Point: EU 402
Emission Unit Description: Hydrocal Finish Bulk C-Base Supply Bin
Raw Material/Fuel: Hydrocal
Rated Capacity: 70 tons/hr

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)
The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity
Emission Limit(s): 7 %
Authority for Requirement: Iowa DNR Construction Permit 01-A-699
567 IAC 23.1(2)"bbb", 40 CFR 60.672(a)(2)

Pollutant: PM_{10}
Emission Limit(s): 0.74 lb/hr
Authority for Requirement: Iowa DNR Construction Permit 01-A-699

Pollutant: Particulate Matter
Emission Limit(s): 0.022 gr/dscf (0.05 grams/dscm)
Authority for Requirement: Iowa DNR Construction Permit 01-A-699
567 IAC 23.1(2)"bbb", 40 CFR 60.672(a)(1)

Emission Point Characteristics
The emission point shall conform to the specifications listed below.

Stack Height (feet): 113' 6"
Stack Diameter (inches): 14
Stack Exhaust Flow Rate (scfm): 3,900
Stack Temperature (^{o}F): 70
Vertical, Unobstructed Discharge Required: Yes ☒ No ☐
Authority for Requirement: Iowa DNR Construction Permit 01-A-699

It shall be the owner's responsibility to ensure that construction conforms with the emission point characteristics stated above. If it is determined that any of the emission point characteristics are different than stated above, the owner must notify the Department and obtain a construction permit amendment, if required.

Periodic Monitoring Requirements
The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.

Opacity Monitoring
The facility shall check the opacity weekly during a period when the emission unit on this emission point is at or near full capacity and record the reading. Opacity shall be observed to ensure that no visible emissions occur during the material handling operation of the unit. If visible emissions are observed corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If corrective action does not return the observation to no visible emissions, then a Method 9 observation will be required. If an opacity greater than 7 % is observed, this would be a violation and corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake opacity readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits.

Weekly observations shall be conducted for a minimum of eight (8) consecutive weeks after permit issuance.
If no visible emissions are observed during this period then:
- Opacity observations shall be made once every other week for a duration of sixteen (16) weeks. If visible emissions are observed, monitoring reverts back to weekly.

If no visible emissions are observed during this period then:
- Observations shall be made once per month. If visible emissions are observed, monitoring reverts back to weekly.

If the source reverts back to weekly monitoring at any time, monitoring frequency will progress in an identical manner from the initial monitoring schedule.

Recordkeeping:
Maintain a written record of the observation and any action resulting from the observation. Records shall be maintained on-site for five (5) years and made available to representatives of the DNR upon request.

Stack Testing:

Pollutant – PM_{10}
Stack Test to be Completed by (date) - within sixty (60) days after achieving maximum production rate and no later than one hundred eighty (180) days after the initial startup date
Test Method – 40 CFR 51, Appendix M, 201A with 202[(1)]
Authority for Requirement – Iowa DNR Construction Permit 01-A-699[(2)]

Pollutant – Particulate Matter
Stack Test to be Completed by (date) - within sixty (60) days after achieving maximum production rate and no later than one hundred eighty (180) days after the initial startup date
Test Method – 40 CFR 60, Appendix A, Method 5
Authority for Requirement – Iowa DNR Construction Permit 01-A-699

Pollutant - Opacity
Stack Test to be Completed by (date) - within sixty (60) days after achieving maximum production rate and no later than one hundred eighty (180) days after the initial startup date
Test Method – 40 CFR 60, Appendix A, Method 9
Authority for Requirement – Iowa DNR Construction Permit 01-A-699

Notes:
(1) Or approved alternative
(2) This test may be waived by the Department if EP 401 demonstrates compliance with the PM_{10} allowable.

The owner of this equipment or the owner's authorized agent shall provide written notice to the Director, not less than 30 days before a required stack test or performance evaluation of a continuous emission monitor. Results of the test shall be submitted in writing to the Director in the form of a comprehensive report within 6 weeks of the completion of the testing. 567 IAC 25.1(7)

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☒ No ☐

Facility operation and maintenance plans must be sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the applicable requirements.

Facility operation and maintenance plans are to be developed by the facility within six(6) months of the issuance date of this permit and the data pertaining to the plan maintained on site for at least 5 years. The plan and associated recordkeeping provides documentation of this facility's implementation of its obligation to operate according to good air pollution control practice.

Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with this emission point.

Authority for Requirement: 567 IAC 22.108(3)"b"

Emission Point ID Number: EP 403

Associated Equipment

Associated Emission Unit ID Number: EU 403
Emissions Control Equipment ID Number: CE 403
Emissions Control Equipment Description: Baghouse

Applicable Requirements

Emission Unit vented through this Emission Point: EU 403
Emission Unit Description: Hydrocal Finish Bulk Type 1 Cement Supply Bin
Raw Material/Fuel: Type 1 Cement
Rated Capacity: 35 tons/hr

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)
The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity
Emission Limit(s): No Visible Emissions[(1)]
Authority for Requirement: Iowa DNR Construction Permit 01-A-700-S1
567 IAC 23.3(2)"d"
[(2)] If visible emissions are observed other than startup, shutdown, or malfunction a stack test may be required to demonstrate compliance with the particulate standard.

Pollutant: PM_{10}
Emission Limit(s): 0.37 lb/hr
Authority for Requirement: Iowa DNR Construction Permit 01-A-700-S1

Pollutant: Particulate Matter
Emission Limit(s): 0.1 gr./dscf
Authority for Requirement: Iowa DNR Construction Permit 01-A-700-S1
567 IAC 23.3(2)"a"

Emission Point Characteristics
The emission point shall conform to the specifications listed below.

Stack Height (feet): 113' 6"
Stack Diameter (inches): 10
Stack Exhaust Flow Rate (scfm): 2,000
Stack Temperature (^{o}F): 70
Vertical, Unobstructed Discharge Required: Yes ☒ No ☐
Authority for Requirement: Iowa DNR Construction Permit 01-A-700-S1

It shall be the owner's responsibility to ensure that construction conforms with the emission point characteristics stated above. If it is determined that any of the emission point characteristics are different than stated above, the owner must notify the Department and obtain a construction permit amendment, if required.

Periodic Monitoring Requirements
The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.

Opacity Monitoring
Opacity shall be observed on a weekly basis to ensure no visible emissions during the material handling operation of the unit. If visible emissions are observed, this would be a violation and corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake opacity readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits.

Weekly observations shall be conducted for a minimum of eight (8) consecutive weeks after permit issuance.
If no visible emissions are observed during this period then:
- Opacity observations shall be made once every other week for a duration of sixteen (16) weeks. If visible emissions are observed, monitoring reverts back to weekly.

If no visible emissions are observed during this period then:
- Observations shall be made once per month. If visible emissions are observed, monitoring reverts back to weekly.

If the source reverts back to weekly monitoring at any time, monitoring frequency will progress in an identical manner from the initial monitoring schedule.

Recordkeeping:
Maintain a written record of the observation and any action resulting from the observation. Records shall be maintained on-site for five (5) years and made available to representatives of the DNR upon request.

Stack Testing:

Pollutant - Opacity
Stack Test to be Completed by (date) - within sixty (60) days after achieving maximum production rate and no later than one hundred eighty (180) days after the initial startup date
Test Method – 40 CFR 60, Appendix A, Method 9
Authority for Requirement – Iowa DNR Construction Permit 01-A-700-S1

The owner of this equipment or the owner's authorized agent shall provide written notice to the Director, not less than 30 days before a required stack test or performance evaluation of a continuous emission monitor. Results of the test shall be submitted in writing to the Director in the form of a comprehensive report within 6 weeks of the completion of the testing. 567 IAC 25.1(7)

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☒ No ☐

Facility operation and maintenance plans must be sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the applicable requirements.

Facility operation and maintenance plans are to be developed by the facility within six(6) months of the issuance date of this permit and the data pertaining to the plan maintained on site for at least 5 years. The plan and associated recordkeeping provides documentation of this facility's implementation of its obligation to operate according to good air pollution control practice.

Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with this emission point.

Authority for Requirement: 567 IAC 22.108(3)"b"

Emission Point ID Number: EP 405

Associated Equipment

Associated Emission Unit ID Number: EU 405
Emissions Control Equipment ID Number: CE 405
Emissions Control Equipment Description: Baghouse

Applicable Requirements

Emission Unit vented through this Emission Point: EU 405
Emission Unit Description: Hydrocal Finish Bulk Floor Fill Stucco Supply Bin
Raw Material/Fuel: Floor Fill Stucco
Rated Capacity: 35 tons/hr

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)
The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity
Emission Limit(s): 7 %
Authority for Requirement: Iowa DNR Construction Permit 01-A-702
567 IAC 23.1(2)"bbb", 40 CFR 60.672(a)(2)

Pollutant: PM_{10}
Emission Limit(s): 0.37 lb/hr
Authority for Requirement: Iowa DNR Construction Permit 01-A-702

Pollutant: Particulate Matter
Emission Limit(s): 0.022 gr/dscf (0.05 grams/dscm)
Authority for Requirement: Iowa DNR Construction Permit 01-A-702
567 IAC 23.1(2)"bbb", 40 CFR 60.672(a)(1)

Emission Point Characteristics
The emission point shall conform to the specifications listed below.

Stack Height (feet): 113' 6"
Stack Diameter (inches): 10
Stack Exhaust Flow Rate (scfm): 2,000
Stack Temperature (^{o}F): 70
Vertical, Unobstructed Discharge Required: Yes ☒ No ☐
Authority for Requirement: Iowa DNR Construction Permit 01-A-702

It shall be the owner's responsibility to ensure that construction conforms with the emission point characteristics stated above. If it is determined that any of the emission point characteristics are different than stated above, the owner must notify the Department and obtain a construction permit amendment, if required.

Periodic Monitoring Requirements
The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.

Opacity Monitoring
The facility shall check the opacity weekly during a period when the emission unit on this emission point is at or near full capacity and record the reading. Opacity shall be observed to ensure that no visible emissions occur during the material handling operation of the unit. If visible emissions are observed corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If corrective action does not return the observation to no visible emissions, then a Method 9 observation will be required. If an opacity greater than 7 % is observed, this would be a violation and corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake opacity readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits.

Weekly observations shall be conducted for a minimum of eight (8) consecutive weeks after permit issuance.
If no visible emissions are observed during this period then:
- Opacity observations shall be made once every other week for a duration of sixteen (16) weeks. If visible emissions are observed, monitoring reverts back to weekly.

If no visible emissions are observed during this period then:
- Observations shall be made once per month. If visible emissions are observed, monitoring reverts back to weekly.

If the source reverts back to weekly monitoring at any time, monitoring frequency will progress in an identical manner from the initial monitoring schedule.

Recordkeeping:
Maintain a written record of the observation and any action resulting from the observation. Records shall be maintained on-site for five (5) years and made available to representatives of the DNR upon request.

Stack Testing:

Pollutant – PM_{10}
Stack Test to be Completed by (date) - within sixty (60) days after achieving maximum production rate and no later than one hundred eighty (180) days after the initial startup date
Test Method – 40 CFR 51, Appendix M, 201A with 202[(1)]
Authority for Requirement – Iowa DNR Construction Permit 01-A-702

Pollutant – Particulate Matter
Stack Test to be Completed by (date) - within sixty (60) days after achieving maximum production rate and no later than one hundred eighty (180) days after the initial startup date
Test Method – 40 CFR 60, Appendix A, Method 5
Authority for Requirement – Iowa DNR Construction Permit 01-A-702

Pollutant - Opacity
Stack Test to be Completed by (date) - within sixty (60) days after achieving maximum production rate and no later than one hundred eighty (180) days after the initial startup date
Test Method – 40 CFR 60, Appendix A, Method 9
Authority for Requirement – Iowa DNR Construction Permit 01-A-702

Notes:
(1) Or approved alternative

The owner of this equipment or the owner's authorized agent shall provide written notice to the Director, not less than 30 days before a required stack test or performance evaluation of a continuous emission monitor. Results of the test shall be submitted in writing to the Director in the form of a comprehensive report within 6 weeks of the completion of the testing. 567 IAC 25.1(7)

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☒ No ☐

Facility operation and maintenance plans must be sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the applicable requirements.

Facility operation and maintenance plans are to be developed by the facility within six(6) months of the issuance date of this permit and the data pertaining to the plan maintained on site for at least 5 years. The plan and associated recordkeeping provides documentation of this facility's implementation of its obligation to operate according to good air pollution control practice.

Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with this emission point.

Authority for Requirement: 567 IAC 22.108(3)"b"

Emission Point ID Number: EP 406

Associated Equipment

Associated Emission Unit ID Number: EU 406
Emissions Control Equipment ID Number: CE 406
Emissions Control Equipment Description: Baghouse

Applicable Requirements

Emission Unit vented through this Emission Point: EU 406
Emission Unit Description: Hydrocal Finish Bulk Finish Stucco Supply Bin
Raw Material/Fuel: Finish Stucco
Rated Capacity: 35 tons/hr

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)
The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity
Emission Limit(s): 7 %
Authority for Requirement: Iowa DNR Construction Permit 01-A-703
567 IAC 23.1(2)"bbb", 40 CFR 60.672(a)(2)

Pollutant: PM_{10}
Emission Limit(s): 0.37 lb/hr
Authority for Requirement: Iowa DNR Construction Permit 01-A-703

Pollutant: Particulate Matter
Emission Limit(s): 0.022 gr/dscf (0.05 grams/dscm)
Authority for Requirement: Iowa DNR Construction Permit 01-A-703
567 IAC 23.1(2)"bbb", 40 CFR 60.672(a)(1)

Emission Point Characteristics
The emission point shall conform to the specifications listed below.

Stack Height (feet): 113' 6"
Stack Diameter (inches): 10
Stack Exhaust Flow Rate (scfm): 2,000
Stack Temperature (^{o}F): 70
Vertical, Unobstructed Discharge Required: Yes ☒ No ☐
Authority for Requirement: Iowa DNR Construction Permit 01-A-703

It shall be the owner's responsibility to ensure that construction conforms with the emission point characteristics stated above. If it is determined that any of the emission point characteristics are different than stated above, the owner must notify the Department and obtain a construction permit amendment, if required.

Periodic Monitoring Requirements
The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.

Opacity Monitoring
The facility shall check the opacity weekly during a period when the emission unit on this emission point is at or near full capacity and record the reading. Opacity shall be observed to ensure that no visible emissions occur during the material handling operation of the unit. If visible emissions are observed corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If corrective action does not return the observation to no visible emissions, then a Method 9 observation will be required. If an opacity greater than 7 % is observed, this would be a violation and corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake opacity readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits.

Weekly observations shall be conducted for a minimum of eight (8) consecutive weeks after permit issuance.
If no visible emissions are observed during this period then:
- Opacity observations shall be made once every other week for a duration of sixteen (16) weeks. If visible emissions are observed, monitoring reverts back to weekly.

If no visible emissions are observed during this period then:
- Observations shall be made once per month. If visible emissions are observed, monitoring reverts back to weekly.

If the source reverts back to weekly monitoring at any time, monitoring frequency will progress in an identical manner from the initial monitoring schedule.

Recordkeeping:
Maintain a written record of the observation and any action resulting from the observation. Records shall be maintained on-site for five (5) years and made available to representatives of the DNR upon request.

Stack Testing:

Pollutant – PM_{10}
Stack Test to be Completed by (date) - within sixty (60) days after achieving maximum production rate and no later than one hundred eighty (180) days after the initial startup date
Test Method – 40 CFR 51, Appendix M, 201A with 202[(1)]
Authority for Requirement – Iowa DNR Construction Permit 01-A-703

Pollutant – Particulate Matter
Stack Test to be Completed by (date) - within sixty (60) days after achieving maximum production rate and no later than one hundred eighty (180) days after the initial startup date
Test Method – 40 CFR 60, Appendix A, Method 5
Authority for Requirement – Iowa DNR Construction Permit 01-A-703

Pollutant - Opacity
Stack Test to be Completed by (date) - within sixty (60) days after achieving maximum production rate and no later than one hundred eighty (180) days after the initial startup date
Test Method – 40 CFR 60, Appendix A, Method 9
Authority for Requirement – Iowa DNR Construction Permit 01-A-703

Notes:
(1) Or approved alternative

The owner of this equipment or the owner's authorized agent shall provide written notice to the Director, not less than 30 days before a required stack test or performance evaluation of a continuous emission monitor. Results of the test shall be submitted in writing to the Director in the form of a comprehensive report within 6 weeks of the completion of the testing. 567 IAC 25.1(7)

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☒ No ☐

Facility operation and maintenance plans must be sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the applicable requirements.

Facility operation and maintenance plans are to be developed by the facility within six(6) months of the issuance date of this permit and the data pertaining to the plan maintained on site for at least 5 years. The plan and associated recordkeeping provides documentation of this facility's implementation of its obligation to operate according to good air pollution control practice.

Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with this emission point.

Authority for Requirement: 567 IAC 22.108(3)"b"

Emission Point ID Number: EP 407

Associated Equipment

Associated Emission Unit ID Number: EU 407
Emissions Control Equipment ID Number: CE 407
Emissions Control Equipment Description: Baghouse

Applicable Requirements

Emission Unit vented through this Emission Point: See table below
Emission Unit Description: Hydrocal Finish Bulk Packaging System
Raw Material/Fuel: Hydrocal
Rated Capacity: See table below

The following emission units vent to the baghouse connected to this emission point:

Emission Unit Description	Maximum Capacity
A-Base Screen (EU 407A)	70 tons/hr
C-Base Screen (EU 407B)	70 tons/hr
Class C Cement Screen (EU 407C)	35 tons/hr
Stucco Screen (EU 407D)	35 tons/hr
A-Base Weigh Hopper (EU 407E)	70 tons/hr
C-Base Weigh Hopper (EU 407F)	70 tons/hr
Class C Weigh Hopper (EU 407G)	35 tons/hr
Stucco Weigh Hopper (EU 407H)	35 tons/hr
Bulk Mixer (EU 407I)	100 tons/hr
Bag Dump Station (EU 407J)	3 tons/hr
Bulk Loading Conveyor (EU 407K)	100 tons/hr
Type 1 Cement Weigh Hopper (EU 407N)	35 tons/hr
Conveyor (EU 407O)	170 tons/hr

Authority for Requirement: Iowa DNR Construction Permit 01-A-704-S2

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)
The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity
Emission Limit(s): 7 %
Authority for Requirement: Iowa DNR Construction Permit 01-A-704-S2
567 IAC 23.1(2)"bbb", 40 CFR 60.672(a)(2)

Pollutant: PM_{10}
Emission Limit(s): 1.51 lb/hr[(1)]
Authority for Requirement: Iowa DNR Construction Permit 01-A-704-S2

Pollutant: Particulate Matter
Emission Limit(s): 0.05 grams/dscm, 0.022 gr/dscf, 1.51 lb/hr[(1)]
Authority for Requirement: Iowa DNR Construction Permit 01-A-704-S2
567 IAC 23.1(2)"bbb", 40 CFR 60.672(a)(1)

[(1)] Standard expressed as the average of 3 runs.

Emission Point Characteristics
The emission point shall conform to the specifications listed below.

Stack Height (feet): 113' 6"
Stack Diameter (inches): 20
Stack Exhaust Flow Rate (scfm): 8,000
Stack Temperature (^{o}F): 70
Vertical, Unobstructed Discharge Required: Yes ☒ No ☐
Authority for Requirement: Iowa DNR Construction Permit 01-A-704-S2

It shall be the owner's responsibility to ensure that construction conforms with the emission point characteristics stated above. If it is determined that any of the emission point characteristics are different than stated above, the owner must notify the Department and obtain a construction permit amendment, if required.

Periodic Monitoring Requirements
The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.

Opacity Monitoring
The facility shall check the opacity weekly during a period when the emission unit on this emission point is at or near full capacity and record the reading. Opacity shall be observed to ensure that no visible emissions occur during the material handling operation of the unit. If visible emissions are observed corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If corrective action does not return the observation to no visible emissions, then a Method 9 observation will be required. If an opacity greater than 7 % is observed, this would be a violation and corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake opacity readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits.

Weekly observations shall be conducted for a minimum of eight (8) consecutive weeks after permit issuance.
If no visible emissions are observed during this period then:

- Opacity observations shall be made once every other week for a duration of sixteen (16) weeks. If visible emissions are observed, monitoring reverts back to weekly.

If no visible emissions are observed during this period then:

- Observations shall be made once per month. If visible emissions are observed, monitoring reverts back to weekly.

If the source reverts back to weekly monitoring at any time, monitoring frequency will progress in an identical manner from the initial monitoring schedule.

Recordkeeping:
Maintain a written record of the observation and any action resulting from the observation. Records shall be maintained on-site for five (5) years and made available to representatives of the DNR upon request.

Stack Testing:

Pollutant – PM_{10}
Stack Test to be Completed by - within sixty (60) days after achieving maximum production rate and no later than one hundred eighty (180) days after the initial startup date
Test Method – 40 CFR 51, Appendix M, 201A with 202[(1)]
Authority for Requirement – Iowa DNR Construction Permit 01-A-704-S2[(2)]

Pollutant – Particulate Matter
Stack Test to be Completed by - within sixty (60) days after achieving maximum production rate and no later than one hundred eighty (180) days after the initial startup date
Test Method – 40 CFR 60, Appendix A, Method 5
Authority for Requirement – Iowa DNR Construction Permit 01-A-704-S2[(2)]

Pollutant - Opacity
Stack Test to be Completed by (date) - within sixty (60) days after achieving maximum production rate and no later than one hundred eighty (180) days after the initial startup date
Test Method – 40 CFR 60, Appendix A, Method 9
Authority for Requirement – Iowa DNR Construction Permit 01-A-704-S2

Notes:
(1) Or approved alternative.
(2) Minimum Test Run = 1 hour

The owner of this equipment or the owner's authorized agent shall provide written notice to the Director, not less than 30 days before a required stack test or performance evaluation of a continuous emission monitor. Results of the test shall be submitted in writing to the Director in the form of a comprehensive report within 6 weeks of the completion of the testing. 567 IAC 25.1(7)

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☒ No ☐

Facility operation and maintenance plans must be sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the applicable requirements.

Facility operation and maintenance plans are to be developed by the facility within six(6) months of the issuance date of this permit and the data pertaining to the plan maintained on site for at least 5 years. The plan and associated recordkeeping provides documentation of this facility's implementation of its obligation to operate according to good air pollution control practice.

Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with this emission point.

Authority for Requirement: 567 IAC 22.108(3)"b"

Emission Point ID Number: EP 409

Associated Equipment

Associated Emission Unit ID Number: EU 409
Emissions Control Equipment ID Number: CE 409
Emissions Control Equipment Description: Baghouse

Applicable Requirements

Emission Unit vented through this Emission Point: EU 409
Emission Unit Description: Hydrocal Finish Bulk C-Base Packaging Supply Bin
Raw Material/Fuel: Hydrocal
Rated Capacity: 35 tons/hr

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)
The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity
Emission Limit(s): 7 %
Authority for Requirement: Iowa DNR Construction Permit 01-A-705
567 IAC 23.1(2)"bbb", 40 CFR 60.672(a)(2)

Pollutant: PM_{10}
Emission Limit(s): 0.37 lb/hr
Authority for Requirement: Iowa DNR Construction Permit 01-A-705

Pollutant: Particulate Matter
Emission Limit(s): 0.022 gr/dscf (0.05 grams/dscm)
Authority for Requirement: Iowa DNR Construction Permit 01-A-705
567 IAC 23.1(2)"bbb", 40 CFR 60.672(a)(1)

Emission Point Characteristics
The emission point shall conform to the specifications listed below.

Stack Height (feet): 113' 6"
Stack Diameter (inches): 10
Stack Exhaust Flow Rate (scfm): 2,000
Stack Temperature (^{o}F): 70
Vertical, Unobstructed Discharge Required: Yes ☒ No ☐
Authority for Requirement: Iowa DNR Construction Permit 01-A-705

It shall be the owner's responsibility to ensure that construction conforms with the emission point characteristics stated above. If it is determined that any of the emission point characteristics are different than stated above, the owner must notify the Department and obtain a construction permit amendment, if required.

Periodic Monitoring Requirements
The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.

Opacity Monitoring
The facility shall check the opacity weekly during a period when the emission unit on this emission point is at or near full capacity and record the reading. Opacity shall be observed to ensure that no visible emissions occur during the material handling operation of the unit. If visible emissions are observed corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If corrective action does not return the observation to no visible emissions, then a Method 9 observation will be required. If an opacity greater than 7 % is observed, this would be a violation and corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake opacity readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits.

Weekly observations shall be conducted for a minimum of eight (8) consecutive weeks after permit issuance.
If no visible emissions are observed during this period then:
- Opacity observations shall be made once every other week for a duration of sixteen (16) weeks. If visible emissions are observed, monitoring reverts back to weekly.

If no visible emissions are observed during this period then:
- Observations shall be made once per month. If visible emissions are observed, monitoring reverts back to weekly.

If the source reverts back to weekly monitoring at any time, monitoring frequency will progress in an identical manner from the initial monitoring schedule.

Recordkeeping:
Maintain a written record of the observation and any action resulting from the observation. Records shall be maintained on-site for five (5) years and made available to representatives of the DNR upon request.

Stack Testing:

Pollutant – PM_{10}
Stack Test to be Completed by (date) - within sixty (60) days after achieving maximum production rate and no later than one hundred eighty (180) days after the initial startup date
Test Method – 40 CFR 51, Appendix M, 201A with 202(1)
Authority for Requirement – Iowa DNR Construction Permit 01-A-705

Pollutant – Particulate Matter
Stack Test to be Completed by (date) - within sixty (60) days after achieving maximum production rate and no later than one hundred eighty (180) days after the initial startup date
Test Method – 40 CFR 60, Appendix A, Method 5
Authority for Requirement – Iowa DNR Construction Permit 01-A-705

Pollutant - Opacity
Stack Test to be Completed by (date) - within sixty (60) days after achieving maximum production rate and no later than one hundred eighty (180) days after the initial startup date
Test Method – 40 CFR 60, Appendix A, Method 9
Authority for Requirement – Iowa DNR Construction Permit 01-A-705

Notes:
(1) Or approved alternative

The owner of this equipment or the owner's authorized agent shall provide written notice to the Director, not less than 30 days before a required stack test or performance evaluation of a continuous emission monitor. Results of the test shall be submitted in writing to the Director in the form of a comprehensive report within 6 weeks of the completion of the testing. 567 IAC 25.1(7)

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☒ No ☐

Facility operation and maintenance plans must be sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the applicable requirements.

Facility operation and maintenance plans are to be developed by the facility within six(6) months of the issuance date of this permit and the data pertaining to the plan maintained on site for at least 5 years. The plan and associated recordkeeping provides documentation of this facility's implementation of its obligation to operate according to good air pollution control practice.

Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with this emission point.

Authority for Requirement: 567 IAC 22.108(3)"b"

Emission Point ID Number: EP 411

Associated Equipment

Associated Emission Unit ID Number: EU 411
Emissions Control Equipment ID Number: CE 411
Emissions Control Equipment Description: Baghouse

Applicable Requirements

Emission Unit vented through this Emission Point: EU 411
Emission Unit Description: Waste Bin
Raw Material/Fuel: Waste
Rated Capacity: 15 tons/hr

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)
The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity
Emission Limit(s): 7 %
Authority for Requirement: Iowa DNR Construction Permit 01-A-706-S2
567 IAC 23.1(2)"bbb", 40 CFR 60.672(a)(2)

Pollutant: PM_{10}
Emission Limit(s): 0.47 lb/hr [(1)]
Authority for Requirement: Iowa DNR Construction Permit 01-A-706-S2

Pollutant: Particulate Matter
Emission Limit(s): 0.022 gr/dscf (0.05 grams/dscm)[(1)]
Authority for Requirement: Iowa DNR Construction Permit 01-A-706-S2
567 IAC 23.1(2)"bbb", 40 CFR 60.672(a)(1)

[(1)] Limit is expressed as the average of three runs.

Emission Point Characteristics
The emission point shall conform to the specifications listed below.

Stack Height (feet): 40
Stack Opening (inches): 13 x 16
Stack Exhaust Flow Rate (scfm): 1,800
Stack Temperature (^{o}F): 70
Vertical, Unobstructed Discharge Required: Yes ☒ No ☐
Authority for Requirement: Iowa DNR Construction Permit 01-A-706-S2

It shall be the owner's responsibility to ensure that construction conforms with the emission point characteristics stated above. If it is determined that any of the emission point characteristics are different than stated above, the owner must notify the Department and obtain a construction permit amendment, if required.

Periodic Monitoring Requirements
The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.

Opacity Monitoring
The facility shall check the opacity weekly during a period when the emission unit on this emission point is at or near full capacity and record the reading. Opacity shall be observed to ensure that no visible emissions occur during the material handling operation of the unit. If visible emissions are observed corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If corrective action does not return the observation to no visible emissions, then a Method 9 observation will be required. If an opacity greater than 7 % is observed, this would be a violation and corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake opacity readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits.

Weekly observations shall be conducted for a minimum of eight (8) consecutive weeks after permit issuance.
If no visible emissions are observed during this period then:
- Opacity observations shall be made once every other week for a duration of sixteen (16) weeks. If visible emissions are observed, monitoring reverts back to weekly.

If no visible emissions are observed during this period then:
- Observations shall be made once per month. If visible emissions are observed, monitoring reverts back to weekly.

If the source reverts back to weekly monitoring at any time, monitoring frequency will progress in an identical manner from the initial monitoring schedule.

Recordkeeping:
Maintain a written record of the observation and any action resulting from the observation. Records shall be maintained on-site for five (5) years and made available to representatives of the DNR upon request.

Stack Testing:

Pollutant – PM_{10}
Stack Test to be Completed – March 18, 2002
Test Method – 40 CFR 51, Appendix M, 201A with 202
Result Concentration – <0.0050 gr/dscf
Result Emission Rate – 0.063 lh/hr
Authority for Requirement – Iowa DNR Construction Permit 01-A-706-S1

Pollutant - Opacity
Stack Test to be Completed –
Test Method – 40 CFR 60, Appendix A, Method 9
Test Result - <7%
Authority for Requirement – Iowa DNR Construction Permit 01-A-706-S1

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)"b"

Emission Point ID Number: EP 412

Associated Equipment

Associated Emission Unit ID Numbers: EU 412
Emissions Control Equipment ID Number: CE 412
Emissions Control Equipment Description: Baghouse

Applicable Requirements

Emission Unit vented through this Emission Point: See table below
Emission Unit Description: Hydrocal Finish Type 1 Cement System
Raw Material/Fuel: Cement, Natural Gas
Rated Capacity: See table below, 3 MMBtu/hr

The following emission units vent to the baghouse connected to this emission point:

Emission Unit Description	Maximum Capacity
Type 1 Cement Surge Bin (EU 412A)	4 tons/hr
Type 1 Cement Cage Mill (EU 412B)	4 tons/hr

Authority for Requirement: Iowa DNR Construction Permit 01-A-707-S1

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)
The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity
Emission Limit(s): 40 %[(1)]
Authority for Requirement: Iowa DNR Construction Permit 01-A-707-S1
567 IAC 23.3(2)"d"

[(1)] Per DNR Air Quality Policy 3-b-08, Opacity Limits, an exceedence of the indicator opacity of 10% will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedence. The permit holder shall also file an "indicator opacity exceedence report" with the DNR field office and keep records as required in the policy. If exceedences continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: PM_{10}
Emission Limit(s): 1.13 lb/hr
Authority for Requirement: Iowa DNR Construction Permit 01-A-707-S1

Pollutant: Particulate Matter
Emission Limit(s): 0.1 gr/scf
Authority for Requirement: Iowa DNR Construction Permit 01-A-707-S1
567 IAC 23.3(2)"a"

Pollutant: Sulfur Dioxide (SO_2)
Emission Limit(s): 500 ppmv
Authority for Requirement: Iowa DNR Construction Permit 01-A-707-S1
567 IAC 23.3(3)"e"

Operational Limits & Requirements
The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Process throughput:
A. The fuel used shall be limited to natural gas

Authority for Requirement: Iowa DNR Construction Permit 01-A-707-S1

Emission Point Characteristics
The emission point shall conform to the specifications listed below.

Stack Height (feet): 42
Stack Diameter (inches): 16
Stack Exhaust Flow Rate (scfm): 3,900
Stack Temperature (^oF): 350
Vertical, Unobstructed Discharge Required: Yes ☒ No ☐
Authority for Requirement: Iowa DNR Construction Permit 01-A-707-S1

It shall be the owner's responsibility to ensure that construction conforms with the emission point characteristics stated above. If it is determined that any of the emission point characteristics are different than stated above, the owner must notify the Department and obtain a construction permit amendment, if required.

Periodic Monitoring Requirements
The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☒ No ☐

Facility operation and maintenance plans must be sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the applicable requirements.

Facility operation and maintenance plans are to be developed by the facility within six(6) months of the issuance date of this permit and the data pertaining to the plan maintained on site for at least 5 years. The plan and associated recordkeeping provides documentation of this facility's implementation of its obligation to operate according to good air pollution control practice.

Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with this emission point.

Authority for Requirement: 567 IAC 22.108(3)"b"

IV. General Conditions

This permit is issued under the authority of the Iowa Code subsection 455B.133(8) and in accordance with 567 Iowa Administrative Code chapter 22.

G1. Duty to Comply

1. The permittee must comply with all conditions of the Title V permit. Any permit noncompliance constitutes a violation of the Act and is grounds for enforcement action; for a permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application. *567 IAC 22.108(9)"a"*
2. Any compliance schedule shall be supplemental to, and shall not sanction noncompliance with, the applicable requirements on which it is based. *567 IAC 22.105 (2)"h"(3)*
3. Where an applicable requirement of the Act is more stringent than an applicable requirement of regulations promulgated under Title IV of the Act, both provisions shall be enforceable by the administrator and are incorporated into this permit. *567 IAC 22.108 (1)"b"*
4. Unless specified as either "state enforceable only" or "local program enforceable only", all terms and conditions in the permit, including provisions to limit a source's potential to emit, are enforceable by the administrator and citizens under the Act. *567 IAC 22.108 (14)*
5. It shall not be a defense for a permittee, in an enforcement action, that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of the permit. *567 IAC 22.108 (9)"b"*

G2. Permit Expiration

1. Except as provided in 567 IAC 22.104, the expiration of this permit terminates the permittee's right to operate unless a timely and complete application has been submitted for renewal. Any testing required for renewal shall be completed before the application is submitted. *567 IAC 22.116(2)*
2. To be considered timely, the owner, operator, or designated representative (where applicable) of each source required to obtain a Title V permit shall present or mail the Air Quality Bureau, Iowa Department of Natural Resources, Air Quality Bureau, 7900 Hickman Rd, Suite #1, Urbandale, Iowa 50322, four or more copies of a complete permit application, at least 6 months but not more than 18 months prior to the date of permit expiration. The definition of a complete application is as indicated in 567 IAC 22.105(2). *567 IAC 22.105*

G3. Certification Requirement for Title V Related Documents

Any application, report, compliance certification or other document submitted pursuant to this permit shall contain certification by a responsible official of truth, accuracy, and completeness. All certifications shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete. *567 IAC 22.107 (4)*

G4. Annual Compliance Certification

By March 31 of each year, the permittee shall submit compliance certifications for the previous calendar year. The certifications shall include descriptions of means to monitor the compliance status of all emissions sources including emissions limitations, standards, and work practices in accordance with applicable requirements. The certification for a source shall include the identification of each term or condition of the permit that is the basis of the certification; the compliance status; whether compliance was continuous or intermittent; the method(s) used for determining the compliance status of the source, currently and over the reporting period consistent with all applicable department rules. For sources determined not to be in compliance at the time of compliance certification, a compliance schedule shall be submitted which provides for periodic progress reports, dates for achieving activities, milestones, and an explanation of

why any dates were missed and preventive or corrective measures. The compliance certification shall be submitted to the administrator, director, and the appropriate DNR Field office. *567 IAC 22.108 (15)"e"*

G5. Semi-Annual Monitoring Report

By March 31 and September 30 of each year, the permittee shall submit a report of any monitoring required under this permit for the 6 month periods of July 1 to December 31 and January 1 to June 30, respectively. All instances of deviations from permit requirements must be clearly identified in these reports, and the report must be signed by a responsible official, consistent with 567 IAC 22.107(4). The semi-annual monitoring report shall be submitted to the director and the appropriate DNR Field office. *567 IAC 22.108 (5)*

G6. Annual Fee

1. The permittee is required under subrule 567 IAC 22.106 to pay an annual fee based on the total tons of actual emissions of each regulated air pollutant. Beginning July 1, 1996, Title V operating permit fees will be paid on July 1 of each year. The fee shall be based on emissions for the previous calendar year.
2. The fee amount shall be calculated based on the first 4,000 tons of each regulated air pollutant emitted each year. The fee to be charged per ton of pollutant will be available from the department by June 1 of each year. The Responsible Official will be advised of any change in the annual fee per ton of pollutant.
3. The following forms shall be submitted annually by March 31 documenting actual emissions for the previous calendar year.
    a. Form 1.0 "Facility Identification";
    b. Form 4.0 "Emissions unit-actual operations and emissions" for each emission unit;
    c. Form 5.0 "Title V annual emissions summary/fee"; and
    d. Part 3 "Application certification."
4. The fee shall be submitted annually by July 1. The fee shall be submitted with the following forms:
    a. Form 1.0 "Facility Identification";
    b. Form 5.0 "Title V annual emissions summary/fee";
    c. Part 3 "Application certification."
5. If there are any changes to the emission calculation form, the department shall make revised forms available to the public by January 1. If revised forms are not available by January 1, forms from the previous year may be used and the year of emissions documented changed. The department shall calculate the total statewide Title V emissions for the prior calendar year and make this information available to the public no later than April 30 of each year.
6. Phase I acid rain affected units under section 404 of the Act shall not be required to pay a fee for emissions which occur during the years 1993 through 1999 inclusive.
7. The fee for a portable emissions unit or stationary source which operates both in Iowa and out of state shall be calculated only for emissions from the source while operating in Iowa.
8. Failure to pay the appropriate Title V fee represents cause for revocation of the Title V permit as indicated in 567 IAC 22.115(1)"d".

G7. Inspection of Premises, Records, Equipment, Methods and Discharges

Upon presentation of proper credentials and any other documents as may be required by law, the permittee shall allow the director or the director's authorized representative to:

1. Enter upon the permittee's premises where a Title V source is located or emissions-related activity is conducted, or where records must be kept under the conditions of the permit;
2. Have access to and copy, at reasonable times, any records that must be kept under the conditions of the permit;
3. Inspect, at reasonable times, any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit; and
4. Sample or monitor, at reasonable times, substances or parameters for the purpose of ensuring compliance with the permit or other applicable requirements. *567 IAC 22.108 (15)"b"*

G8. Duty to Provide Information

The permittee shall furnish to the director, within a reasonable time, any information that the director may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee also shall furnish to the director copies of records required to be kept by the permit, or for information claimed to be confidential, the permittee shall furnish such records directly to the administrator of EPA along with a claim of confidentiality. *567 IAC 22.108 (9)"e"*

G9. General Maintenance and Repair Duties

The owner or operator of any air emission source or control equipment shall:

1. Maintain and operate the equipment or control equipment at all times in a manner consistent with good practice for minimizing emissions.
2. Remedy any cause of excess emissions in an expeditious manner.
3. Minimize the amount and duration of any excess emission to the maximum extent possible during periods of such emissions. These measures may include but not be limited to the use of clean fuels, production cutbacks, or the use of alternate process units or, in the case of utilities, purchase of electrical power until repairs are completed.
4. Schedule, at a minimum, routine maintenance of equipment or control equipment during periods of process shutdowns to the maximum extent possible. *567 IAC 24.2(1)*

G10. Recordkeeping Requirements for Compliance Monitoring

1. In addition to any source specific recordkeeping requirements contained in this permit, the permittee shall maintain the following compliance monitoring records, where applicable:
    a. The date, place and time of sampling or measurements
    b. The date the analyses were performed.
    c. The company or entity that performed the analyses.
    d. The analytical techniques or methods used.
    e. The results of such analyses; and
    f. The operating conditions as existing at the time of sampling or measurement.
    g. The records of quality assurance for continuous compliance monitoring systems (including but not limited to quality control activities, audits and calibration drifts.)
2. The permittee shall retain records of all required compliance monitoring data and support information for a period of at least 5 years from the date of compliance monitoring sample, measurement report or application. Support information includes all calibration and maintenance records and all original strip chart recordings for continuous compliance monitoring, and copies of all reports required by the permit.

3. For any source which in its application identified reasonably anticipated alternative operating scenarios, the permittee shall:

a. Comply with all terms and conditions of this permit specific to each alternative scenario.

b. Maintain a log at the permitted facility of the scenario under which it is operating.

c. Consider the permit shield, if provided in this permit, to extend to all terms and conditions under each operating scenario. *567 IAC 22.108(4), 567 IAC 22.108(12)*

G11. Evidence used in establishing that a violation has or is occurring.

Notwithstanding any other provisions of these rules, any credible evidence may be used for the purpose of establishing whether a person has violated or is in violation of any provisions herein.

1. Information from the use of the following methods is presumptively credible evidence of whether a violation has occurred at a source:

a. A monitoring method approved for the source and incorporated in an operating permit pursuant to 567 Chapter 22;

b. Compliance test methods specified in 567 Chapter 25; or

c. Testing or monitoring methods approved for the source in a construction permit issued pursuant to 567 Chapter 22.

2. The following testing, monitoring or information gathering methods are presumptively credible testing, monitoring, or information gathering methods:

a. Any monitoring or testing methods provided in these rules; or

b. Other testing, monitoring, or information gathering methods that produce information comparable to that produced by any method in subrule 21.5(1) or this subrule. *567 IAC 21.5(1)-567 IAC 21.5(2)*

G12. Prevention of Accidental Release: Risk Management Plan Notification and Compliance Certification

If the permittee is required to develop and register a risk management plan pursuant to section 112(r) of the Act, the permittee shall notify the department of this requirement. The plan shall be filed with all appropriate authorities by the deadline specified by EPA. A certification that this risk management plan is being properly implemented shall be included in the annual compliance certification of this permit. *567 IAC 22.108(6)*

G13. Hazardous Release

The permittee must report any situation involving the actual, imminent, or probable release of a hazardous substance into the atmosphere which, because of the quantity, strength and toxicity of the substance, creates an immediate or potential danger to the public health, safety or to the environment. A verbal report shall be made to the department at (515) 281-8694 and to the local police department or the office of the sheriff of the affected county as soon as possible but not later than six hours after the discovery or onset of the condition. This verbal report must be followed up with a written report as indicated in 567 IAC 131.2(2). *567 IAC Chapter 131-State Only*

G14. Excess Emissions and Excess Emissions Reporting Requirements

1. Excess Emissions. Excess emission during a period of startup, shutdown, or cleaning of control equipment is not a violation of the emission standard if the startup, shutdown or cleaning is accomplished expeditiously and in a manner consistent with good practice for minimizing emissions. Cleaning of control equipment which does not require the shutdown of the process equipment shall be limited to one six-minute period per one-hour period. An incident of excess emission (other than an incident during startup, shutdown or cleaning of control equipment) is a violation. If the owner or operator of a source maintains that the incident of excess emission was due to a malfunction, the owner or operator must show that the conditions which caused the

incident of excess emission were not preventable by reasonable maintenance and control measures. Determination of any subsequent enforcement action will be made following review of this report. If excess emissions are occurring, either the control equipment causing the excess emission shall be repaired in an expeditious manner or the process generating the emissions shall be shutdown within a reasonable period of time. An expeditious manner is the time necessary to determine the cause of the excess emissions and to correct it within a reasonable period of time. A reasonable period of time is eight hours plus the period of time required to shut down the process without damaging the process equipment or control equipment. In the case of an electric utility, a reasonable period of time is eight hours plus the period of time until comparable generating capacity is available to meet consumer demand with the affected unit out of service, unless, the director shall, upon investigation, reasonably determine that continued operation constitutes an unjustifiable environmental hazard and issue an order that such operation is not in the public interest and require a process shutdown to commence immediately.

2. Excess Emissions Reporting

a. Oral Reporting of Excess Emissions. An incident of excess emission (other than an incident of excess emission during a period of startup, shutdown, or cleaning) shall be reported to the appropriate field office of the department within eight hours of, or at the start of the first working day following the onset of the incident. The reporting exemption for an incident of excess emission during startup, shutdown or cleaning does not relieve the owner or operator of a source with continuous monitoring equipment of the obligation of submitting reports required in 567-subrule 25.1(6). An oral report of excess emission is not required for a source with operational continuous monitoring equipment (as specified in 567-subrule 25.1(1)) if the incident of excess emission continues for less than 30 minutes and does not exceed the applicable visible emission standard by more than 10 percent opacity. The oral report may be made in person or by telephone and shall include as a minimum the following:

i. The identity of the equipment or source operation from which the excess emission originated and the associated stack or emission point.

ii. The estimated quantity of the excess emission.

iii. The time and expected duration of the excess emission.

iv. The cause of the excess emission.

v. The steps being taken to remedy the excess emission.

vi. The steps being taken to limit the excess emission in the interim period.

b. Written Reporting of Excess Emissions. A written report of an incident of excess emission shall be submitted as a follow-up to all required oral reports to the department within seven days of the onset of the upset condition, and shall include as a minimum the following:

i. The identity of the equipment or source operation point from which the excess emission originated and the associated stack or emission point.

ii. The estimated quantity of the excess emission.

iii. The time and duration of the excess emission.

iv. The cause of the excess emission.

v. The steps that were taken to remedy and to prevent the recurrence of the incident of excess emission.

vi. The steps that were taken to limit the excess emission.

vii. If the owner claims that the excess emission was due to malfunction, documentation to support this claim. *567 IAC 24.1(1)-567 IAC 24.1(4)*

3. Emergency Defense for Excess Emissions. For the purposes of this permit, an "emergency" means any situation arising from sudden and reasonably unforeseeable events beyond the control of the source, including acts of God, which requires immediate corrective action to restore normal operation, and that causes the source to exceed a technology-based emission limitation under the permit due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include non-compliance, to the extent caused by improperly designed equipment, lack of preventive maintenance, careless or improper operation or operator error. An emergency constitutes an affirmative defense to an action brought for non-compliance with technology based limitations if it can be demonstrated through properly signed contemporaneous operating logs or other relevant evidence that:

a. An emergency occurred and that the permittee can identify the cause(s) of the emergency;

b. The facility at the time was being properly operated;

c. During the period of the emergency, the permittee took all reasonable steps to minimize levels of emissions that exceeded the emissions standards or other requirements of the permit; and

d. The permittee submitted notice of the emergency to the director by certified mail within two working days of the time when the emissions limitations were exceeded due to the emergency. This notice must contain a description of the emergency, any steps taken to mitigate emissions, and corrective actions taken. *567 IAC 22.108(16)*

G15. Permit Deviation Reporting Requirements

A deviation is any failure to meet a term, condition or applicable requirement in the permit. Reporting requirements for deviations that result in a hazardous release or excess emissions have been indicated above (see G13 and G14). Unless more frequent deviation reporting is specified in the permit, any other deviation shall be documented in the semi-annual monitoring report and the annual compliance certification (see G4 and G5). *567 IAC 22.108(5)"b"*

G16. Notification Requirements for Sources That Become Subject to NSPS and NESHAP Regulations

During the term of this permit, the permittee must notify the department of any source that becomes subject to a standard or other requirement under 567-subrule 23.1(2) (standards of performance of new stationary sources) or section 111 of the Act; or 567-subrule 23.1(3) (emissions standards for hazardous air pollutants), 567-subrule 23.1(4) (emission standards for hazardous air pollutants for source categories) or section 112 of the Act. This notification shall be submitted in writing to the department pursuant to the notification requirements in 40 CFR Section 60.7, 40 CFR Section 61.07, and/or 40 CFR Section 63.9. *567 IAC 23.1(2), 567 IAC 23.1(3), 567 IAC 23.1(4)*

G17. Requirements for Making Changes to Emission Sources That Do Not Require Title V Permit Modification

1. Off Permit Changes to a Source. Pursuant to section 502(b)(10) of the CAAA, the permittee may make changes to this installation/facility without revising this permit if:

a. The changes are not major modifications under any provision of any program required by section 110 of the Act, modifications under section 111 of the act, modifications under section 112 of the act, or major modifications as defined in 567 IAC Chapter 22.

b. The changes do not exceed the emissions allowable under the permit (whether expressed therein as a rate of emissions or in terms of total emissions);

c. The changes are not modifications under any provisions of Title I of the Act and the changes do not exceed the emissions allowable under the permit (whether expressed therein as a rate of emissions or as total emissions);

d. The changes are not subject to any requirement under Title IV of the Act.
e. The changes comply with all applicable requirements.
f. For such a change, the permitted source provides to the department and the administrator by certified mail, at least 30 days in advance of the proposed change, a written notification, including the following, which must be attached to the permit by the source, the department and the administrator:

i. A brief description of the change within the permitted facility,
ii. The date on which the change will occur,
iii. Any change in emission as a result of that change,
iv. The pollutants emitted subject to the emissions trade
v. If the emissions trading provisions of the state implementation plan are invoked, then Title V permit requirements with which the source shall comply; a description of how the emissions increases and decreases will comply with the terms and conditions of the Title V permit.
vi. A description of the trading of emissions increases and decreases for the purpose of complying with a federally enforceable emissions cap as specified in and in compliance with the Title V permit; and
vii. Any permit term or condition no longer applicable as a result of the change. *567 IAC 22.110(1)*

2. Such changes do not include changes that would violate applicable requirements or contravene federally enforceable permit terms and conditions that are monitoring (including test methods), record keeping, reporting, or compliance certification requirements. *567 IAC 22.110(2)*
3. Notwithstanding any other part of this rule, the director may, upon review of a notice, require a stationary source to apply for a Title V permit if the change does not meet the requirements of subrule 22.110(1). *567 IAC 22.110(3)*
4. The permit shield provided in subrule 22.108(18) shall not apply to any change made pursuant to this rule. Compliance with the permit requirements that the source will meet using the emissions trade shall be determined according to requirements of the state implementation plan authorizing the emissions trade. *567 IAC 22.110(4)*
5. Aggregate Insignificant Emissions. The permittee shall not construct, establish or operate any new insignificant activities or modify any existing insignificant activities in such a way that the emissions from these activities no longer meet the criteria of aggregate insignificant emissions. If the aggregate insignificant emissions are expected to be exceeded, the permittee shall submit the appropriate permit modification and receive approval prior to making any change. *567 IAC 22.103(2)*
6. No permit revision shall be required, under any approved economic incentives, marketable permits, emissions trading and other similar programs or processes, for changes that are provided for in this permit. *567 IAC 22.108(11)*

G18. Duty to Modify a Title V Permit

1. Administrative Amendment.

a. An administrative permit amendment is a permit revision that is required to do any of the following:

i. Correct typographical errors
ii. Identify a change in the name, address, or telephone number of any person identified in the permit, or provides a similar minor administrative change at the source;
iii. Require more frequent monitoring or reporting by the permittee; or

iv. Allow for a change in ownership or operational control of a source where the director determines that no other change in the permit is necessary, provided that a written agreement containing a specific date for transfer of permit responsibility, coverage and liability between the current and new permittee has been submitted to the director.

b. The permittee may implement the changes addressed in the request for an administrative amendment immediately upon submittal of the request. The request shall be submitted to the director.

c. Administrative amendments to portions of permits containing provisions pursuant to Title IV of the Act shall be governed by regulations promulgated by the administrator under Title IV of the Act.

2. Minor Permit Modification.

a. Minor permit modification procedures may be used only for those permit modifications that do any of the following:

i. Do not violate any applicable requirements

ii. Do not involve significant changes to existing monitoring, reporting or recordkeeping requirements in the Title V permit.

iii. Do not require or change a case by case determination of an emission limitation or other standard, or increment analysis.

iv. Do not seek to establish or change a permit term or condition for which there is no corresponding underlying applicable requirement and that the source has assumed in order to avoid an applicable requirement to which the source would otherwise be subject. Such terms and conditions include any federally enforceable emissions caps which the source would assume to avoid classification as a modification under any provision under Title I of the Act; and an alternative emissions limit approved pursuant to regulations promulgated under section 112(i)(5) of the Act.;

v. Are not modifications under any provision of Title I of the Act; and

vi. Are not required to be processed as significant modification.

b. An application for minor permit revision shall be on the minor Title V modification application form and shall include at least the following:

i. A description of the change, the emissions resulting from the change, and any new applicable requirements that will apply if the change occurs.

ii. The permittee's suggested draft permit

iii. Certification by a responsible official, pursuant to 567 IAC 22.107(4), that the proposed modification meets the criteria for use of a minor permit modification procedures and a request that such procedures be used; and

iv. Completed forms to enable the department to notify the administrator and the affected states as required by 567 IAC 22.107(7).

c. The permittee may make the change proposed in its minor permit modification application immediately after it files the application. After the permittee makes this change and until the director takes any of the actions specified in 567 IAC 22.112(4) "a" to "c", the permittee must comply with both the applicable requirements governing the change and the proposed permit terms and conditions. During this time, the permittee need not comply with the existing permit terms and conditions it seeks to modify. However, if the permittee fails to comply with its proposed permit terms and conditions during this time period, existing permit term terms and conditions it seeks to modify may subject the facility to enforcement action.

3. Significant Permit Modification. Significant Title V modification procedures shall be used for applications requesting Title V permit modifications that do not qualify as minor Title V modifications or as administrative amendments. These include but are not limited to all significant changes in monitoring permit terms, every relaxation of reporting or recordkeeping permit terms, and any change in the method of measuring compliance with existing requirements. Significant Title V modifications shall meet all requirements of 567 IAC Chapter 22, including those for applications, public participation, review by affected states, and review by the administrator, and those requirements that apply to Title V issuance and renewal. *567 IAC 22.111-567 IAC 22.113* The permittee shall submit an application for a significant permit modification not later than three months after commencing operation of the changed source unless the existing Title V permit would prohibit such construction or change in operation, in which event the operation of the changed source may not commence until the department revises the permit. *567 IAC 22.105(1)"a"(4)*

G19. Duty to Obtain Construction Permits

Unless exempted under 567 IAC 22.1(2), the permittee must not construct, install, reconstruct, or alter any equipment, control equipment or anaerobic lagoon without first obtaining a construction permit, conditional permit, or permit pursuant to 567 IAC 22.8, or permits required pursuant to 567 IAC 22.4 and 567 IAC 22.5. Such permits shall be obtained prior to the initiation of construction, installation or alteration of any portion of the stationary source. *567 IAC 22.1(1)*

G20. Asbestos

The permittee shall comply with 567 IAC 23.1(3)"a", and 567 IAC 23.2(3)"g" when conducting any renovation or demolition activities at the facility. *567 IAC 23.1(3)"a", and 567 IAC 23.2*

G21. Open Burning

The permittee is prohibited from conducting open burning, except as may be allowed by 567 IAC 23.2. *567 IAC 23.2 <u>except</u> 23.2(3)"h"; 567 IAC 23.2(3)"h" - State Only*

G22. Acid Rain (Title IV) Emissions Allowances

The permittee shall not exceed any allowances that it holds under Title IV of the Act or the regulations promulgated there under. Annual emissions of sulfur dioxide in excess of the number of allowances to emit sulfur dioxide held by the owners and operators of the unit or the designated representative of the owners and operators is prohibited. Exceedences of applicable emission rates are prohibited. "Held" in this context refers to both those allowances assigned to the owners and operators by USEPA, and those allowances supplementally acquired by the owners and operators. The use of any allowance prior to the year for which it was allocated is prohibited. Contravention of any other provision of the permit is prohibited. *567 IAC 22.108(7)*

G23. Stratospheric Ozone and Climate Protection (Title VI) Requirements

1. The permittee shall comply with the standards for labeling of products using ozone-depleting substances pursuant to 40 CFR Part 82, Subpart E:

a. All containers in which a class I or class II substance is stored or transported, all products containing a class I substance, and all products directly manufactured with a class I substance must bear the required warning statement if it is being introduced into interstate commerce pursuant to § 82.106.

b. The placement of the required warning statement must comply with the requirements pursuant to § 82.108.

c. The form of the label bearing the required warning statement must comply with the requirements pursuant to § 82.110.

d. No person may modify, remove, or interfere with the required warning statement except as described in § 82.112.

2. The permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 CFR Part 82, Subpart F, except as provided for MVACs in Subpart B:

a. Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to § 82.156.

b. Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to § 82.158.

c. Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to § 82.161.

d. Persons disposing of small appliances, MVACs, and MVAC-like appliances must comply with reporting and recordkeeping requirements pursuant to § 82.166. ("MVAC-like appliance" as defined at § 82.152)

e. Persons owning commercial or industrial process refrigeration equipment must comply with the leak repair requirements pursuant to § 82.156.

f. Owners/operators of appliances normally containing 50 or more pounds of refrigerant must keep records of refrigerant purchased and added to such appliances pursuant to § 82.166.

3. If the permittee manufactures, transforms, imports, or exports a class I or class II substance, the permittee is subject to all the requirements as specified in 40 CFR part 82, Subpart A, Production and Consumption Controls.

4. If the permittee performs a service on motor (fleet) vehicles when this service involves ozone-depleting substance refrigerant (or regulated substitute substance) in the motor vehicle air conditioner (MVAC), the permittee is subject to all the applicable requirements as specified in 40 CFR part 82, Subpart B, Servicing of Motor Vehicle Air Conditioners. The term "motor vehicle" as used in Subpart B does not include a vehicle in which final assembly of the vehicle has not been completed. The term "MVAC" as used in Subpart B does not include the air-tight sealed refrigeration system used as refrigerated cargo, or system used on passenger buses using HCFC-22 refrigerant,

5. The permittee shall be allowed to switch from any ozone-depleting substance to any alternative that is listed in the Significant New Alternatives Program (SNAP) promulgated pursuant to 40 CFR part 82, Subpart G, Significant New Alternatives Policy Program. *40 CFR part 82*

G24. Permit Reopenings

1. This permit may be modified, revoked, reopened, and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition. *567 IAC 22.108(9)"c"*

2. Additional applicable requirements under the Act become applicable to a major part 70 source with a remaining permit term of 3 or more years. Revisions shall be made as expeditiously as practicable, but not later than 18 months after the promulgation of such standards and regulations.

a. Reopening and revision on this ground is not required if the permit has a remaining term of less than three years;

b. Reopening and revision on this ground is not required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions have been extended pursuant to 40 CFR 70.4(b)(10)(i) or (ii) as amended to June 25, 1993.

c. Reopening and revision on this ground is not required if the additional applicable requirements are implemented in a general permit that is applicable to the source and the source receives approval for coverage under that general permit. *567 IAC 22.108(17)"a", 567 IAC 22.108(17)"b"*

3. A permit shall be reopened and revised under any of the following circumstances:

a. The department receives notice that the administrator has granted a petition for disapproval of a permit pursuant to 40 CFR 70.8(d) as amended to June 25, 1993, provided that the reopening may be stayed pending judicial review of that determination;

b. The department or the administrator determines that the Title V permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the Title V permit;

c. Additional applicable requirements under the Act become applicable to a Title V source, provided that the reopening on this ground is not required if the permit has a remaining term of less than three years, the effective date of the requirement is later than the date on which the permit is due to expire, or the additional applicable requirements are implemented in a general permit that is applicable to the source and the source receives approval for coverage under that general permit. Such a reopening shall be complete not later than 18 months after promulgation of the applicable requirement.

d. Additional requirements, including excess emissions requirements, become applicable to a Title IV affected source under the acid rain program. Upon approval by the administrator, excess emissions offset plans shall be deemed to be incorporated into the permit.

e. The department or the administrator determines that the permit must be revised or revoked to ensure compliance by the source with the applicable requirements. *567 IAC 22.114(1)*

4. Proceedings to reopen and reissue a Title V permit shall follow the procedures applicable to initial permit issuance and shall effect only those parts of the permit for which cause to reopen exists. *567 IAC 22.114(2)*

G25. Permit Shield

Compliance with the conditions of this permit shall be deemed compliance with the applicable requirements included in this permit as of the date of permit issuance.

This permit shield shall not alter or affect the following:

1. The provisions of section 303 of the Act (emergency orders), including the authority of the administrator under that section;
2. The liability of an owner or operator of a source for any violation of applicable requirements prior to or at the time of permit issuance;
3. The applicable requirements of the acid rain program, consistent with section 408(a) of the Act;
4. The ability of the department or the administrator to obtain information from the facility pursuant to section 114 of the Act. *567 IAC 22.108 (18)*

G26. Severability

The provisions of this permit are severable and if any provision or application of any provision is found to be invalid by this department or a court of law, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected by such finding. *567 IAC 22.108 (8)*

G27. Property Rights

The permit does not convey any property rights of any sort, or any exclusive privilege. *567 IAC 22.108 (9)"d"*

G28. Transferability
This permit is not transferable from one source to another. If title to the facility or any part of it is transferred, an administrative amendment to the permit must be sought to determine transferability of the permit. *567 IAC 22.111 (1)"d"*

G29. Disclaimer
No review has been undertaken on the engineering aspects of the equipment or control equipment other than the potential of that equipment for reducing air contaminant emissions. *567 IAC 22.3(3)"c"*

G30. Notification and Reporting Requirements for Stack Tests or Monitor Certification
The permittee shall notify the department's stack test contact in writing not less than 30 days before a required test or performance evaluation of a continuous emission monitor is performed to determine compliance with an applicable requirement. For the department to consider test results a valid demonstration of compliance with applicable rules or a permit condition, such notice shall be given. Such notice shall include the time, the place, the name of the person who will conduct the test and other information as required by the department. Unless specifically waived by the department's stack test contact, a pretest meeting shall be held not later than 15 days prior to conducting the compliance demonstration. The department may accept a testing protocol in lieu of a pretest meeting. A representative of the department shall be permitted to witness the tests. Results of the tests shall be submitted in writing to the department's stack test contact in the form of a comprehensive report within six weeks of the completion of the testing. Compliance tests conducted pursuant to this permit shall be conducted with the source operating in a normal manner at its maximum continuous output as rated by the equipment manufacturer, or the rate specified by the owner as the maximum production rate at which the source shall be operated. In cases where compliance is to be demonstrated at less than the maximum continuous output as rated by the equipment manufacturer, and it is the owner's intent to limit the capacity to that rating, the owner may submit evidence to the department that the source has been physically altered so that capacity cannot be exceeded, or the department may require additional testing, continuous monitoring, reports of operating levels, or any other information deemed necessary by the department to determine whether such source is in compliance.
Stack test notifications, reports and correspondence shall be sent to:

Stack Test Review Coordinator
Iowa DNR, Air Quality Bureau
7900 Hickman Road, Suite #1
Urbandale, IA 50322
(515) 242-6001

Within Polk and Linn Counties, stack test notifications, reports and correspondence shall also be directed to the supervisor of the respective county air pollution program.
567 IAC 25.1(7)"a", 567 IAC 25.1(9)

G31. Prevention of Air Pollution Emergency Episodes
The permittee shall comply with the provisions of 567 IAC Chapter 26 in the prevention of excessive build-up of air contaminants during air pollution episodes, thereby preventing the occurrence of an emergency due to the effects of these contaminants on the health of persons. *567 IAC 26.1(1)*

G32. Contacts List

The current address and phone number for reports and notifications to the EPA administrator is:

Chief of Air Permits
EPA Region 7
Air Permits and Compliance Branch
901 N. 5th Street
Kansas City, KS 66101
(913) 551-7020

The current address and phone number for reports and notifications to the department or the Director is:

Chief, Air Quality Bureau
Iowa Department of Natural Resources
7900 Hickman Road, Suite #1
Urbandale, IA 50322
(515) 242-5100

Reports or notifications to the DNR Field Offices or local programs shall be directed to the supervisor at the appropriate field office or local program. Current addresses and phone numbers are:

Field Office 1
909 West Main – Suite 4
Manchester, IA 52057
(563) 927-2640

Field Office 2
P.O. Box 1443
2300-15th St., SW
Mason City, IA 50401
(641) 424-4073

Field Office 3
1900 N. Grand Ave.
Spencer, IA 51301
(712) 262-4177

Field Office 4
1401 Sunnyside Lane
Atlantic, IA 50022
(712) 243-1934

Field Office 5
401 SW 7th Street, Suite I
Des Moines, IA 50309
(515) 725-0268

Field Office 6
1004 W. Madison
Washington, IA 52353
(319) 653-2135

Polk County Public Health Dept.
Air Quality Division
5885 NE 14th St.
Des Moines, IA 50313
(515) 286-3351

Linn County Public Health Dept.
Air Pollution Control Division
501 13th St., NW
Cedar Rapids, IA 52405
(319) 892-6000

Appendix 1
DNR Air Quality Policy
3-b-08 (Opacity Limits)